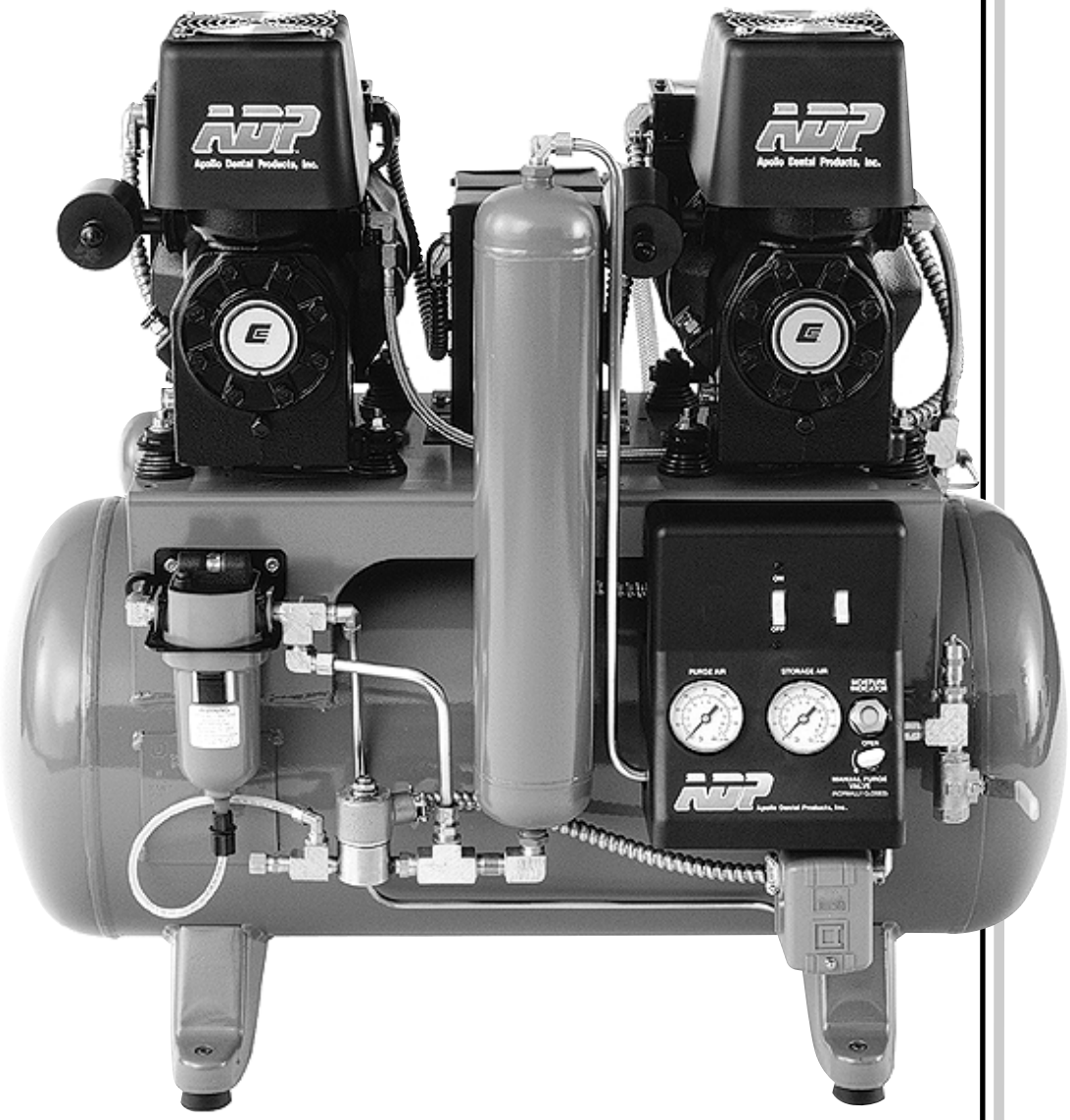
Go To Table of Contents

Apollo Dental Products by MIDMARK®

TROUBLE-SHOOTING GUIDE
LUBRICATED COMPRESSOR



APOLLO DENTAL PRODUCTS, INC.

Introduction

The Lubricated Compressor Trouble-Shooting Guide from Apollo Dental Products is designed to reduce the amount of time it takes to identify problems with any ADP Lubricated Compressor. The guide also contains exploded parts lists that make it easier to correctly identify a defective component and its related part number. If a problem is not easily determined, please feel free to contact the ADP Technical Support Division. When calling for assistance, please have the model number and serial number available.

Call Technical Support
Monday - Friday
7:00 a.m. - 5:00 p.m. (Pacific Time)

Apollo Dental Products, Inc.
245 W. Dakota Ave. • Clovis, California 93612
Telephone: (559) 292-1444
US WATS: (800) 233-4151
Fax: (559) 292-1555
E-Mail: support@apollodental.com
Website: www.apollodental.com

For additional copies of this Trouble-Shooting Guide, you may order part number AMM45000.

Table of Contents

Introduction ..... Page i

Policies and Procedures ..... Page ii

Compressor Specification Table ..... Page 1

Compressor Maintenance Kits ..... Page 2

Single Head Trouble-Shooting Chart ..... Page 3

Exploded Single Head Lubricated / Desiccant Model ..... Page 5

Exploded Single Head Lubricated / Standard Model ..... Page 7

Twin Head Trouble-Shooting Chart ..... Page 9

Exploded Twin Head Lubricated / Desiccant Model ..... Page 11

Exploded Twin Head Lubricated / Standard Model ..... Page 13

Triple Head Trouble-Shooting Chart ..... Page 15

Exploded Triple Head Lubricated / Desiccant Model ..... Page 17

Exploded Triple Head Lubricated / Standard Model ..... Page 19

Quad Head Trouble-Shooting Chart ..... Page 21

Exploded Quad Head Lubricated / Desiccant Model ..... Page 23

Exploded Quad Head Lubricated / Standard Model ..... Page 25

Glossary of Terms ..... Page 27

Return To Table of Contents

Customer Service/Technical Support

Department hours are from 7:00 AM through 5:00 PM PST. ADP Customer Service/Technical Support is available for order entry and technical support by phone (800) 233-4151 or (559) 292-1444 or FAX (559) 292-1555, Monday through Friday. Fridays we are open until 5:00 PM PST and we are closed on major holidays.

Additional product documentation and specifications are available through our automated fax library at your request. For extensive technical service, we refer you to the Apollo Engineering Team for problem solving.

Order Processing

All orders for ADP equipment and accessories must be placed through an authorized ADP dealer and processed by Apollo Dental Products, 245 West Dakota Avenue, Clovis, CA 93612, U.S.A.

- All equipment and accessories will be shipped C.O.D. unless your business has been issued a line of credit with ADP.
- Credit terms require invoices to be paid within 30 days of the invoice date. A 1.5% per month service charge applies on all unpaid balances in excess of 45 days.
- Orders are confirmed via FAX from ADP. You must provide a Telefax number.
- There will be a $25.00 service charge on all returned checks.

Please include the following information with your order:

- Purchase Order Number
- Model Number
- Requested Ship Date
- Side Mark Information
- Name of Person Placing Order
- Method of Shipment and Address

Shipping / Damage

- All shipments are F.O.B. Clovis, California or from one of the ADP distribution sites.
- Products are shipped via UPS. All products that exceed the UPS maximum size (150 lbs. or 103" length or 130" length/girth combined) will be shipped via common carrier. C.O.D. charges will be added to all C.O.D. shipments.
- At your request, we will ship via any air express carrier, at your expense.
- UPS DAMAGE: Accept shipment and file claim with UPS.
- TRUCK/AIR DAMAGE: Accept and note all damages clearly on the bill of lading. ADP is not responsible for concealed damage. The dealer is responsible for filing damage claim with the carrier. No credit will be issued on freight damaged replacement parts.

Product Return

Dealers may return authorized non-defective products within 90 days of the invoice date under the following conditions:

- There is a 15% restocking charge on all non-defective returns.
- All returned products must be in condition to resell. (unopened, undamaged, complete and in the original packaging)
- Your account must be current with no past due balances.
- Returns will be credited at the lower of the invoice price or current dealer price. Credit memos for use against future purchases will be issued for authorized returns.
- Only products currently offered by ADP will be accepted.
- To expedite the return procedure:
  You must obtain a Return Authorization Number (R.A.N.) from ADP Customer Service prior to returning the goods.

  Please provide the following information:

  - Company Name
  - Invoice Date
  - Serial Number
  - New Item Requested
  - Invoice Number
  - Product Name and Model Number
  - Reason for Return

- Display the R.A.N. on the shipping label of all boxes containing returned goods.
- Returned goods must be shipped freight prepaid in their original boxes and packing materials.

Warranty

All ADP units are thoroughly inspected and tested in accordance with rigid specifications and standards. Our products are guaranteed against any defective material and workmanship from the date of shipment; provided, that the installation, operation, and maintenance is done in accordance with ADP procedures as outlined in our Installation and Maintenance Guides. Warranty cards **must** be returned to ADP within ten days of installation to effect warranty.

ADP's obligation under the warranty is to provide parts for the repair or, at it's option, to provide the replacement product (excluding labor). All special, incidental and/or consequential damages are excluded. We will not issue credit for complete air compressors or vacuum systems without first attempting to correct the problem in the field. Written notice of breach of warranty must be given to ADP within the warranty period. The warranty does not cover damage resulting from improper installation or maintenance, accident or misuse. The warranty does not cover damage resulting from the use of cleaning, disinfecting or sterilizing chemicals and processes. Failure to follow instructions provided in ADP's Installation and Maintenance Guides may void the warranty.

Lubricated Compressor Specification Table

Number Of Heads	Models	Max Number Users	CFM@80PSI	Total Horsepower	Tank Capacity (Gallons)	Voltage	Total Amps	Recommended Breaker Size	Sound Level (DB-A)	Width (In.)	Depth (In.)	Height (In.)	Weight (lb.) (Shipping)	Accessories: Wall Mount Desiccant Air Dryer	Refrigerated Air Dryer	Compressor Starter Contactor	Fresh-Air Intake	Fresh-Air Intake Pipe Size (in.)	Automatic Tank Drain Valve
1	SL11	1	3.2	3/4	7	115	11.5	20	66	23	17	30	198	ACADAD5	ACARAD5	ACACSC	ACA85370	1 1/2	ACAAD1
	SL11D	1	3.2	3/4	7	115	11.5	20	66	23	17	30	223	N/A	N/A	ACACSC	ACA85370	1 1/2	N/A
	SL12	1	3.2	3/4	7	208/230	5.0	20	66	23	17	30	198	ACADAD5	ACARAD10	ACACSC	ACA85370	1 1/2	ACAAD1
	SL12D	1	3.2	3/4	7	208/230	5.0	20	66	23	17	30	223	N/A	N/A	ACACSC	ACA85370	1 1/2	N/A
	SL21	2	4.7	1.0	10	115	12.4	20	68	23	18 1/2	31	207	ACADAD5	ACARAD10	ACACSC	ACA85370	1 1/2	ACAAD1
	SL21D	2	4.7	1.0	10	115	12.4	20	68	23	18 1/2	31	230	N/A	N/A	ACACSC	ACA85370	1 1/2	N/A
	SL22	2	4.7	1.0	10	208/230	6.4	20	68	23	18 1/2	31	207	ACADAD5	ACARAD10	ACACSC	ACA85370	1 1/2	ACAAD1
	SL22D	2	4.7	1.0	10	208/230	6.4	20	68	23	18 1/2	31	230	N/A	N/A	ACACSC	ACA85370	1 1/2	N/A
2	TL31	3	6.4	1 1/2	15	115	23.0	30	69	33	19	31	326	ACADAD15	ACARAD10	ACACSC	ACA85375	1 1/2	ACAAD1
	TL31D	3	6.4	1 1/2	15	115	23.0	30	69	33	23	31	350	N/A	N/A	ACACSC	ACA85375	1 1/2	N/A
	TL32	3	6.4	1 1/2	15	208/230	10.0	20	69	33	19	31	326	ACADAD15	ACARAD10	ACACSC	ACA85375	1 1/2	ACAAD1
	TL32D	3	6.4	1 1/2	15	208/230	10.0	20	69	33	23	31	350	N/A	N/A	ACACSC	ACA85375	1 1/2	N/A
	TL41	4	9.4	2.0	20	115	24.8	40	71	34	20	33	345	ACADAD15	ACARAD10	ACACSC	ACA85375	1 1/2	ACAAD1
	TL41D	4	9.4	2.0	20	115	24.8	40	71	34	20	33	369	N/A	N/A	ACACSC	ACA85375	1 1/2	N/A
	TL42	4	9.4	2.0	20	208/230	12.8	20	71	34	20	33	345	ACADAD15	ACARAD10	ACACSC	ACA85375	1 1/2	ACAAD1
	TL42D	4	9.4	2.0	20	208/230	12.8	20	71	34	23	33	369	N/A	N/A	ACACSC	ACA85375	1 1/2	N/A
3	RL62	6	14.1	3.0	30	208/230	19.2	30	75	38	24	36	515	ACADAD15	ACARAD15	ACACSC	ACA85380	2	ACAAD1
	RL62D	6	14.1	3.0	30	208/230	19.2	30	75	38	28	36	545	N/A	N/A	ACACSC	ACA85380	2	N/A
4	QL82	8	18.8	4.0	40	208/230	25.6	40	79	40	26	40	723	ACADAD15	ACARAD15	ACACSC	ACA85390	2	ACAAD1
	QL82D	8	18.8	4.0	40	208/230	25.6	40	79	40	30	40	753	N/A	N/A	ACACSC	ACA85390	2	N/A

Options: For compressor mounted, Compressor Starter Contactor, add **"C"** suffix to the compressor part number. (**ie., TL42DC**)

Notes: Remote fresh air intake air temperature must not exceed compressor room air temperature by more than 20˚ Fahrenheit. **Moisture will condense in the air intake line and enter the compressor head. Resultant contamination will cause compressor failure.** Compressor must be installed in a clean, dry, well ventilated area, on a solid, level floor. Ambient temperature must be within the range of 40˚ Fahrenheit minimum (4˚ Celcius) to 100˚ Fahrenheit maximum (38˚ Celcius).
All Twin, Triple, Quad compressor motors must be **"ON"** during normal operating conditions.
"D" denotes Desiccant Dryer equipped model.

Return To Table of Contents

Return To Table of Contents

Lubricated Compressor Maintenance Kits

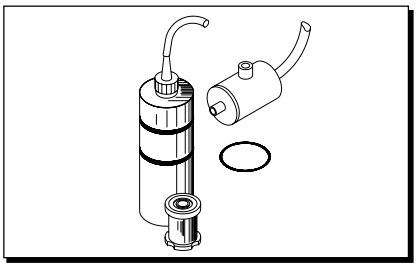
Without periodic maintenance, our automobiles would not last two years. Consider operation run hours of an automobile compared to a dental air compressor operating 8 to 10 hours per day. A compressor operating 40 hours a week at 35% duty cycle would be equivalent to 770 automobile miles driven at 55 miles per hour.

Given the above comparison, it's easy to see the importance of regular service and maintenance. At Apollo Dental, we are committed to supplying our customers with a quality product that will provide many years of service. Our compressor maintenance kits, along with your commitment to regularly scheduled service and maintenance, will ensure extended equipment life.

Single Head Lubricated Compressor

Part Number: ACA85400

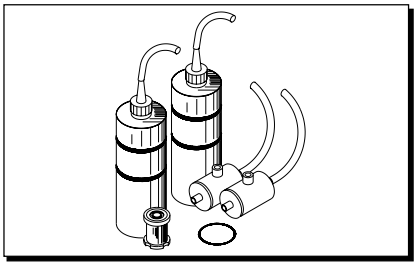
- (1) Bottle of Oil
- (1) Air Intake Filter
- (1) Coalescing Filter Element and O-Ring



Twin Head Lubricated Compressor

Part Number: ACA85401

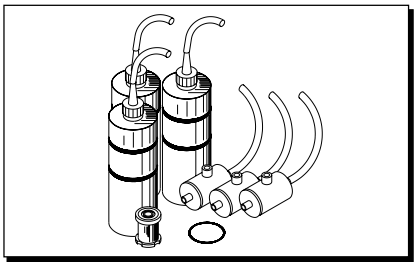
- (2) Bottles of Oil
- (2) Air Intake Filter
- (1) Coalescing Filter Element and O-Ring



Triple Head Lubricated Compressor

Part Number: ACA85402

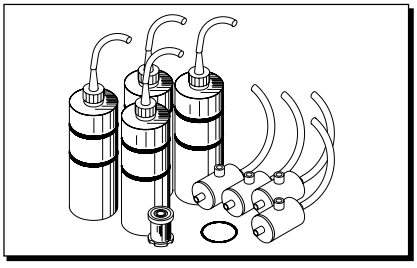
- (3) Bottles of Oil
- (3) Air Intake Filter
- (1) Coalescing Filter Element and O-Ring



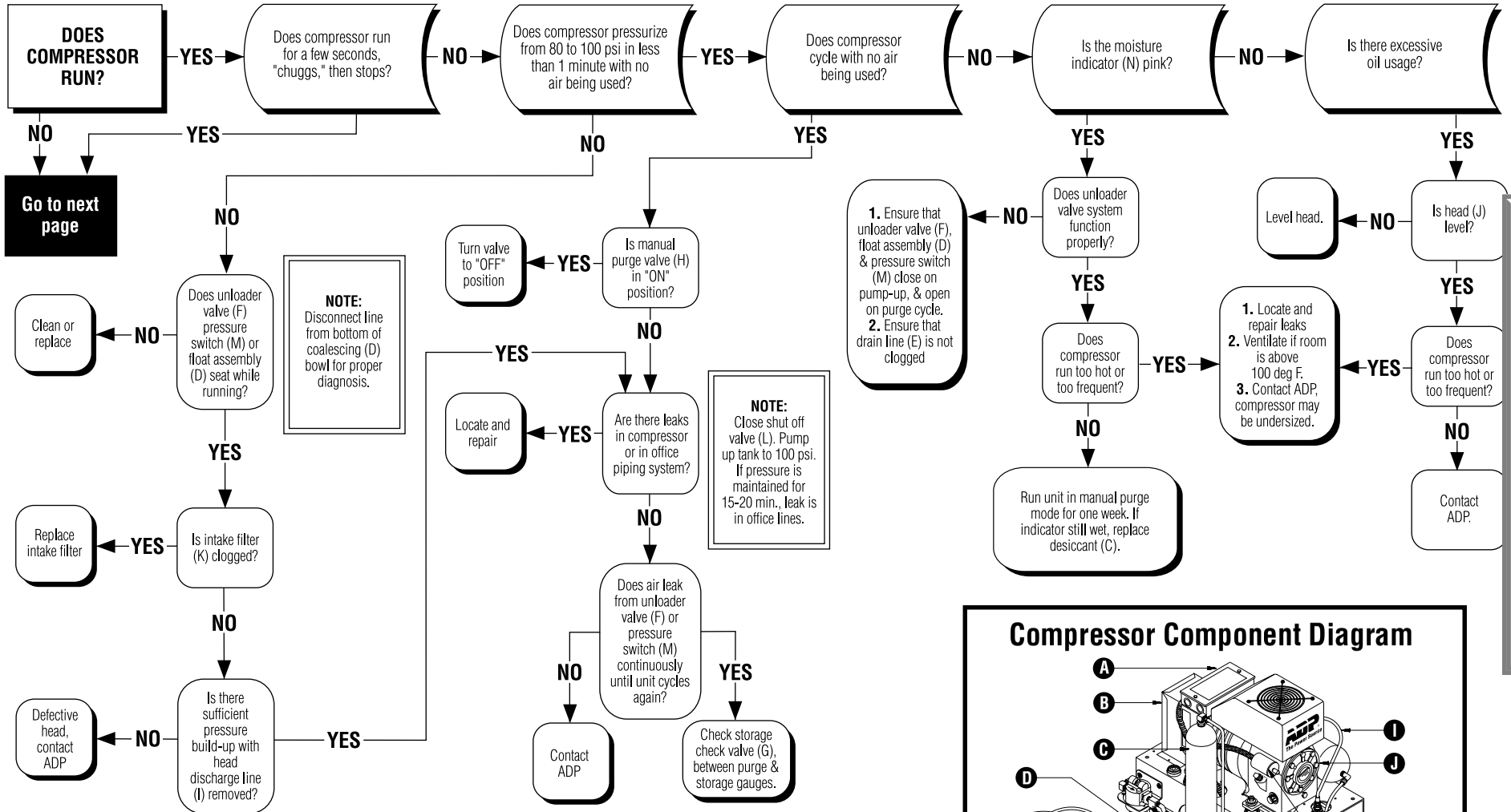
Quad Head Lubricated Compressor

Part Number: ACA85407

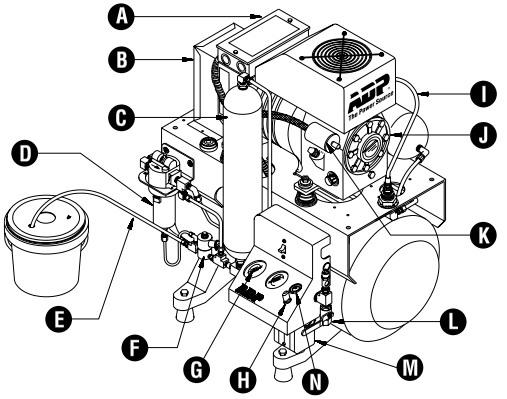
- (4) Bottles of Oil
- (4) Air Intake Filter
- (1) Coalescing Filter Element and O-Ring



Trouble-Shooting Chart
Single Head Lubricated Compressor

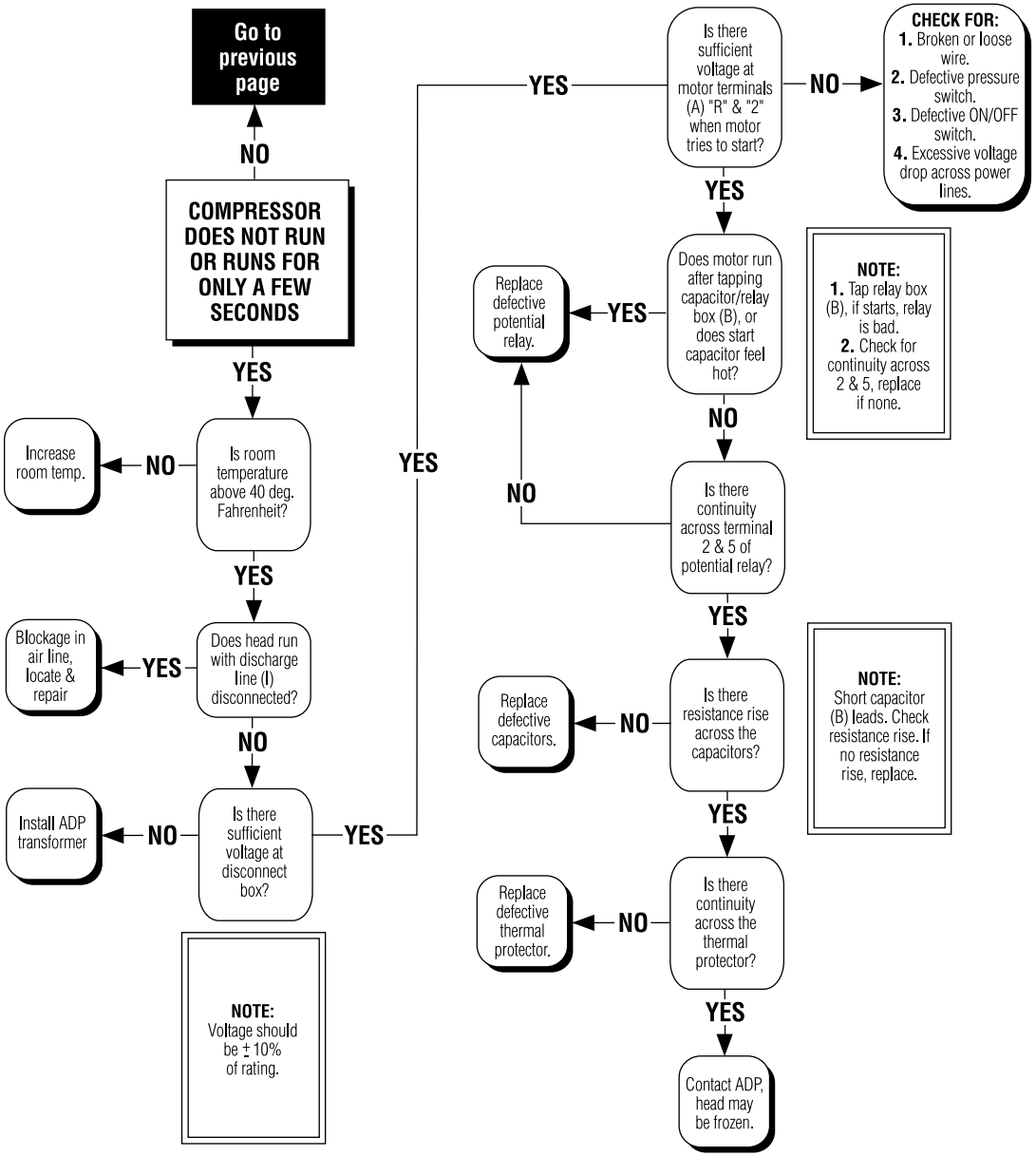

DOES COMPRESSOR RUN?
YES
Does compressor run for a few seconds, "chuggs," then stops?
NO
Does compressor pressurize from 80 to 100 psi in less than 1 minute with no air being used?
YES
Does compressor cycle with no air being used?
NO
Is the moisture indicator (N) pink?
NO
Is there excessive oil usage?
NO
Go to next page
YES
NO
Does unloader valve (F) pressure switch (M) or float assembly (D) seat while running?
NO
Clean or replace
YES
Is intake filter (K) clogged?
YES
Replace intake filter
NO
Is there sufficient pressure build-up with head discharge line (I) removed?
NO
Defective head, contact ADP
YES
NOTE: Disconnect line from bottom of coalescing (D) bowl for proper diagnosis.
NO
Is manual purge valve (H) in "ON" position?
YES
Turn valve to "OFF" position
NO
Are there leaks in compressor or in office piping system?
YES
Locate and repair
NO
Does air leak from unloader valve (F) or pressure switch (M) continuously until unit cycles again?
NO
Contact ADP
YES
Check storage check valve (G), between purge & storage gauges.
NOTE: Close shut off valve (L). Pump up tank to 100 psi. If pressure is maintained for 15-20 min., leak is in office lines.
YES
Does unloader valve system function properly?
NO
1. Ensure that unloader valve (F), float assembly (D) & pressure switch (M) close on pump-up, & open on purge cycle.
2. Ensure that drain line (E) is not clogged
YES
Does compressor run too hot or too frequent?
YES
1. Locate and repair leaks
2. Ventilate if room is above 100 deg F.
3. Contact ADP, compressor may be undersized.
NO
Run unit in manual purge mode for one week. If indicator still wet, replace desiccant (C).
YES
Is head (J) level?
NO
Level head.
YES
Does compressor run too hot or too frequent?
YES
NO
Contact ADP.

Compressor Component Diagram

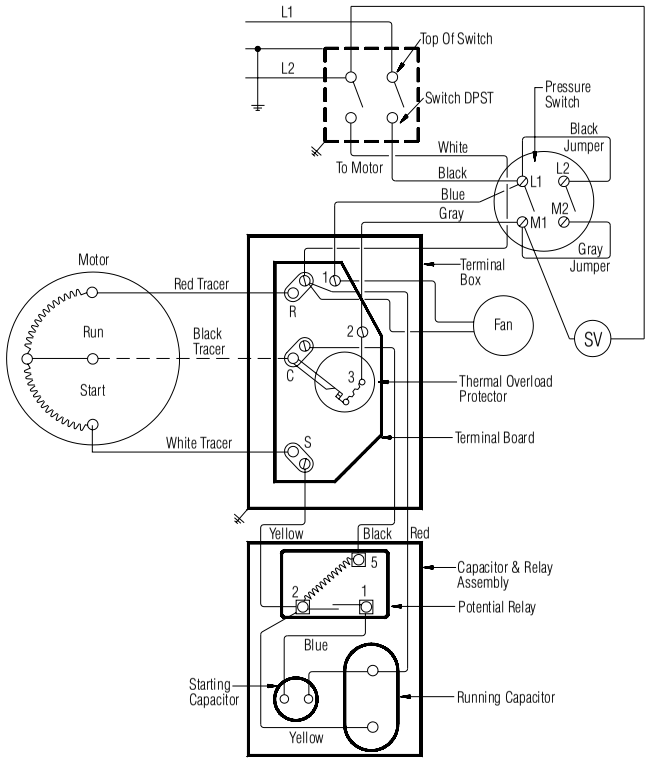


Return To Table of Contents

Trouble-Shooting Chart
Single Head Lubricated Compressor


Go to previous page
NO
COMPRESSOR DOES NOT RUN OR RUNS FOR ONLY A FEW SECONDS
YES
Is room temperature above 40 deg. Fahrenheit?
NO
Increase room temp.
YES
Does head run with discharge line (I) disconnected?
YES
Blockage in air line, locate & repair
NO
Is there sufficient voltage at disconnect box?
NO
Install ADP transformer
YES
NOTE: Voltage should be ± 10% of rating.
YES
Is there sufficient voltage at motor terminals (A) "R" & "2" when motor tries to start?
NO
CHECK FOR:
1. Broken or loose wire.
2. Defective pressure switch.
3. Defective ON/OFF switch.
4. Excessive voltage drop across power lines.
YES
Does motor run after tapping capacitor/relay box (B), or does start capacitor feel hot?
YES
Replace defective potential relay.
NO
NOTE:
1. Tap relay box (B), if starts, relay is bad.
2. Check for continuity across 2 & 5, replace if none.
NO
Is there continuity across terminal 2 & 5 of potential relay?
YES
Is there resistance rise across the capacitors?
NO
Replace defective capacitors.
YES
NOTE: Short capacitor (B) leads. Check resistance rise. If no resistance rise, replace.
Is there continuity across the thermal protector?
NO
Replace defective thermal protector.
YES
Contact ADP, head may be frozen.

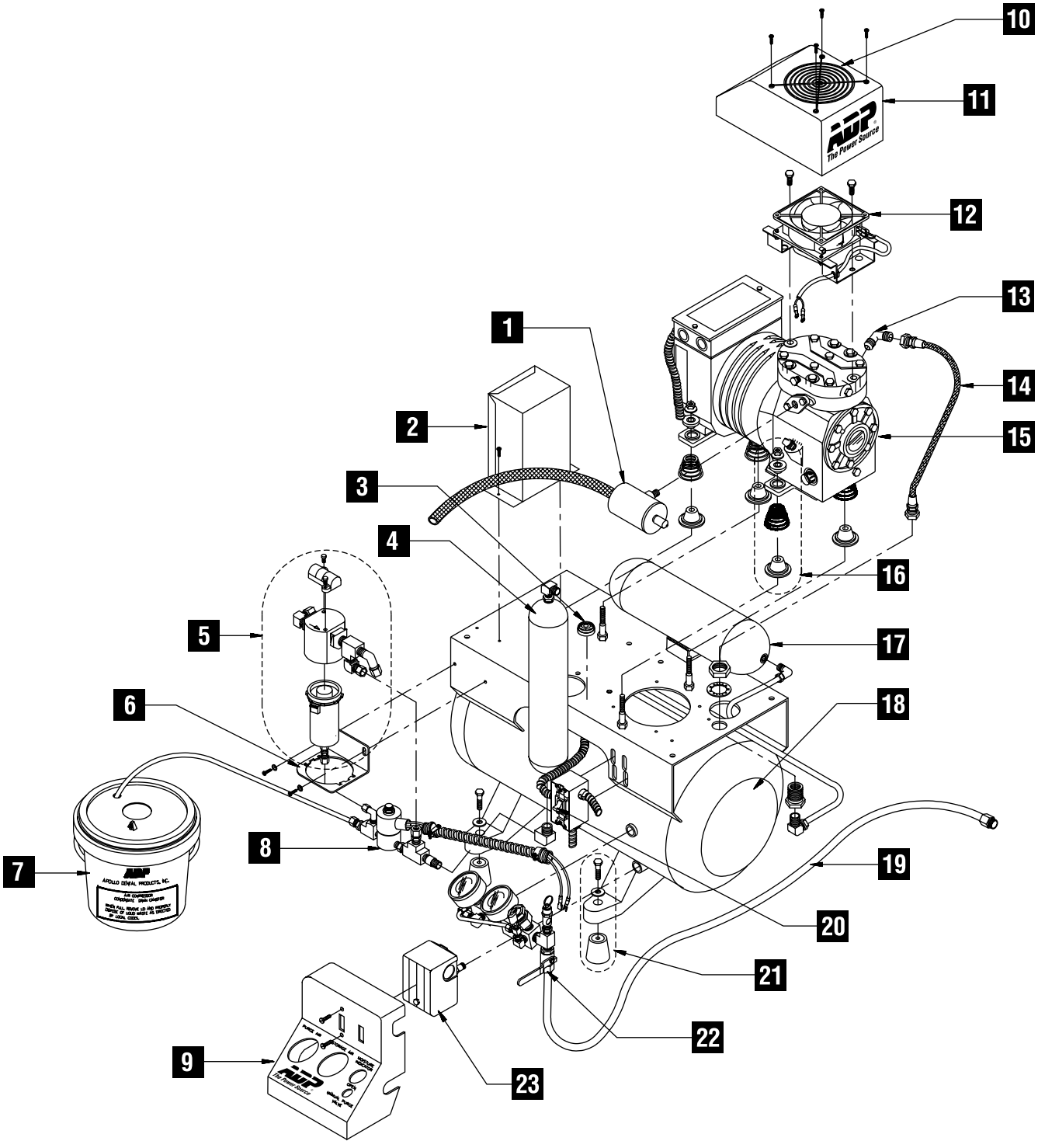
Compressor Wiring Diagram



Return To Table of Contents

Return To Table of Contents

Desiccant Model
Single Head Lubricated



Return To Table of Contents

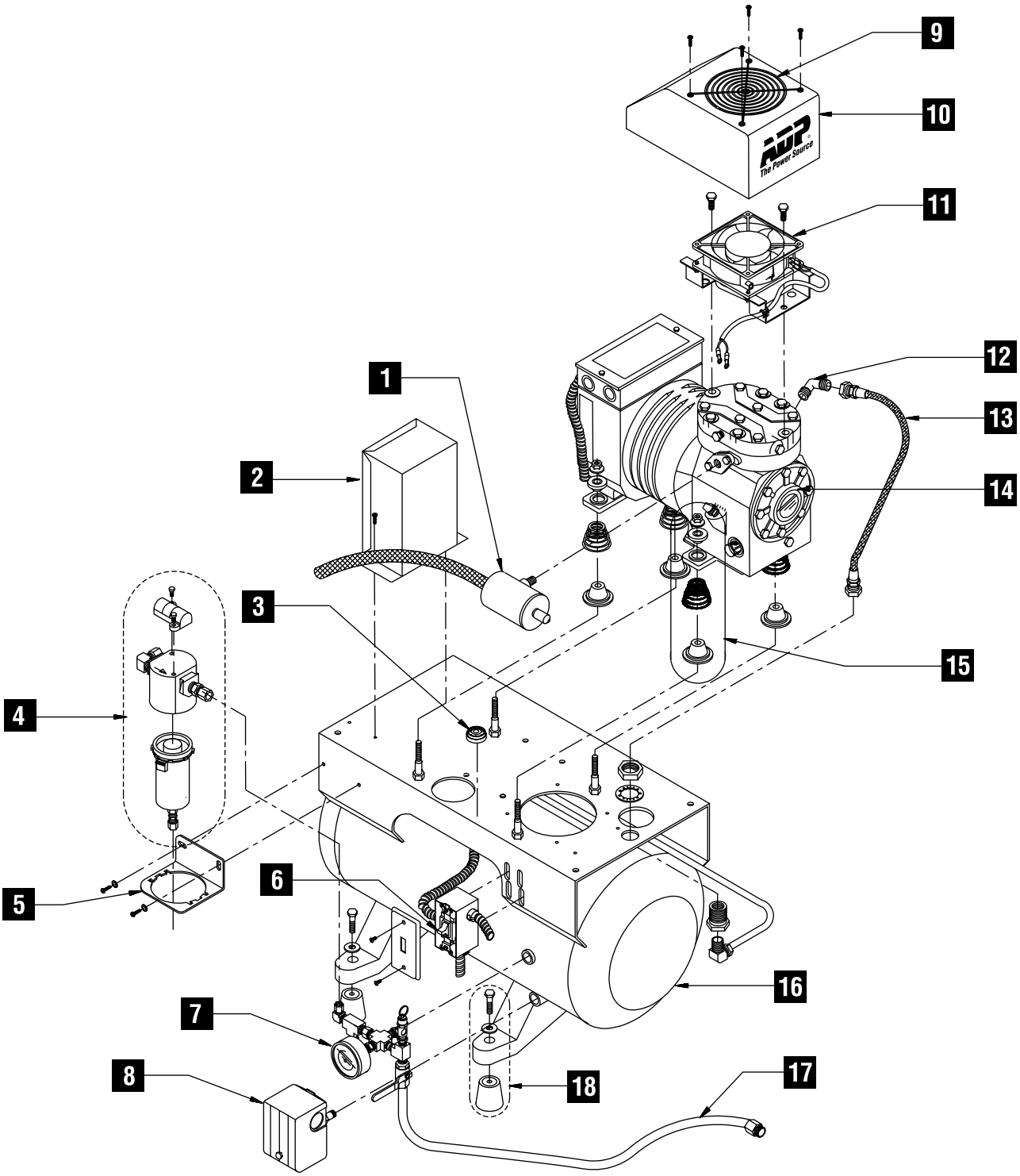
Desiccant Model
Single Head Lubricated

Item	Description	Quantity	SL11D	SL12D	SL21D	SL22D
1	Filter, Air Intake*	1	ACP90500	ACP90500	ACP90500	ACP90500
2	Assembly, Capacitor/Relay	1	SPD95275	SPD95285	SPA95280	SPD95291
2a	Capacitor, Start	1	HCA30626	HCA30625	HCA30628	HCA30625
2b	Capacitor, Run	1	---	HCA30621	HCA30620	HCA30622
2c	Relay, Potential	1	HCA30652	HCA30653	HCA30654	HCA30655
3	Level, Bubble	1	MMS70400	MMS70400	MMS70400	MMS70400
4	Assembly, Dryer Tank w/ Desiccant	1	ACA85308	ACA85308	ACA85308	ACA85308
4a	Kit, Desiccant Only Replacement	1	ACA85345	ACA85345	ACA85345	ACA85345
5	Assembly, Ultrair Complete	1	ACA70305	ACA70305	ACA70305	ACA70305
5a	Element, .01 micron Ultrair*	1	ACA86050	ACA86050	ACA86050	ACA86050
5b	Assembly, Float	1	ACA85210	ACA85210	ACA85210	ACA85210
5c	Indicator, Differential Pressure	1	AAP85210	AAP85210	AAP85210	AAP85210
6	Bracket, Ultrair	1	MBS70107	MBS70107	MBS70107	MBS70107
7	Canister, Condensate Drain	1	SPA95400	SPA95400	SPA95400	SPA95400
8	Valve, Quick Exhaust (Solenoid)	1	PVV70501	PVV70502	PVV70501	PVV70502
8a	Kit, Repair Solenoid	1	ACA85332	ACA85332	ACA85332	ACA85332
8b	Coil, Solenoid Valve	1	ECO10117	ECO10118	ECO10117	ECO10118
9	Shroud, Cluster Panel	1	ACP70210	ACP70210	ACP70210	ACP70210
10	Guard, Fan	1	MMS70200	MMS70200	MMS70200	MMS70200
11	Shroud, Fan	1	ACP70205	ACP70205	ACP70205	ACP70205
12	Assembly, Fan (w/ Brackets)	1	SEA95240	SEA95245	SEA95240	SEA95245
12a	Fan	1	SEA95335	SEA95340	SEA95335	SEA95340
12b	Bracket, Fan	2	MBS70102	MBS70102	MBS70102	MBS70102
13	Flare Fitting	1	PCB50125	PCB50125	PCB50125	PCB50125
14	Hose, Flex 12”	1	PCH50206	PCH50206	PCH50206	PCH50206
15	Assy, Comp. Head (w/ Oil & Cap. Assy.)	1	ACH95445	ACH95450	ACH95455	ACH95460
15a	Kit, Sight Glass Repair	1	ACA85322	ACA85322	ACA85322	ACA85322
15b	Oil, 16 oz. Bottle*	1	ACA85921	ACA85921	ACA85921	ACA85921
16	Kit, Motor Mount	1	HCA30900	HCA30900	HCA30900	HCA30900
17	Tank, Purge	1	STK96000	STK96000	STK96002	STK96002
18	Tank, Receiver (7 gal. & 10 gal.)	1	TST90303	TST90303	TST90307	TST90307
19	Hose, 5’ x 3/8”	1	ACA85955	ACA85955	ACA85955	ACA85955
20	Switch, ON/OFF	1	ECS10417	ECS10417	ECS10417	ECS10417
21	Feet, Rubber	4	ACA85975	ACA85975	ACA85975	ACA85975
22	Assembly, Control Cluster	1	SPA94000	SPA94000	SPA94000	SPA94000
22a	Kit, Mositure Indicator	1	ACA85965	ACA85965	ACA85965	ACA85965
22b	Gauge, Air Pressure	2	PGA70400	PGA70400	PGA70400	PGA70400
22c	Valve, Ball 3/8”	1	PVV50500	PVV50500	PVV50500	PVV50500
22d	Valve, Check 3/8”	1	PVV50515	PVV50515	PVV50515	PVV50515
22e	Valve, Manual Purge	1	PVV50550	PVV50550	PVV50550	PVV50550
22f	Valve, Safety 125 PSI	1	PVV50560	PVV50560	PVV50560	PVV50560
23	Switch, Pressure	1	ECS10445	ECS10445	ECS10445	ECS10445
24	Maintenance Kit	1	ACA85400	ACA85400	ACA85400	ACA85400

*** Parts Included In Maintenance Kit**

Return To Table of Contents

Standard Model
Single Head Lubricated



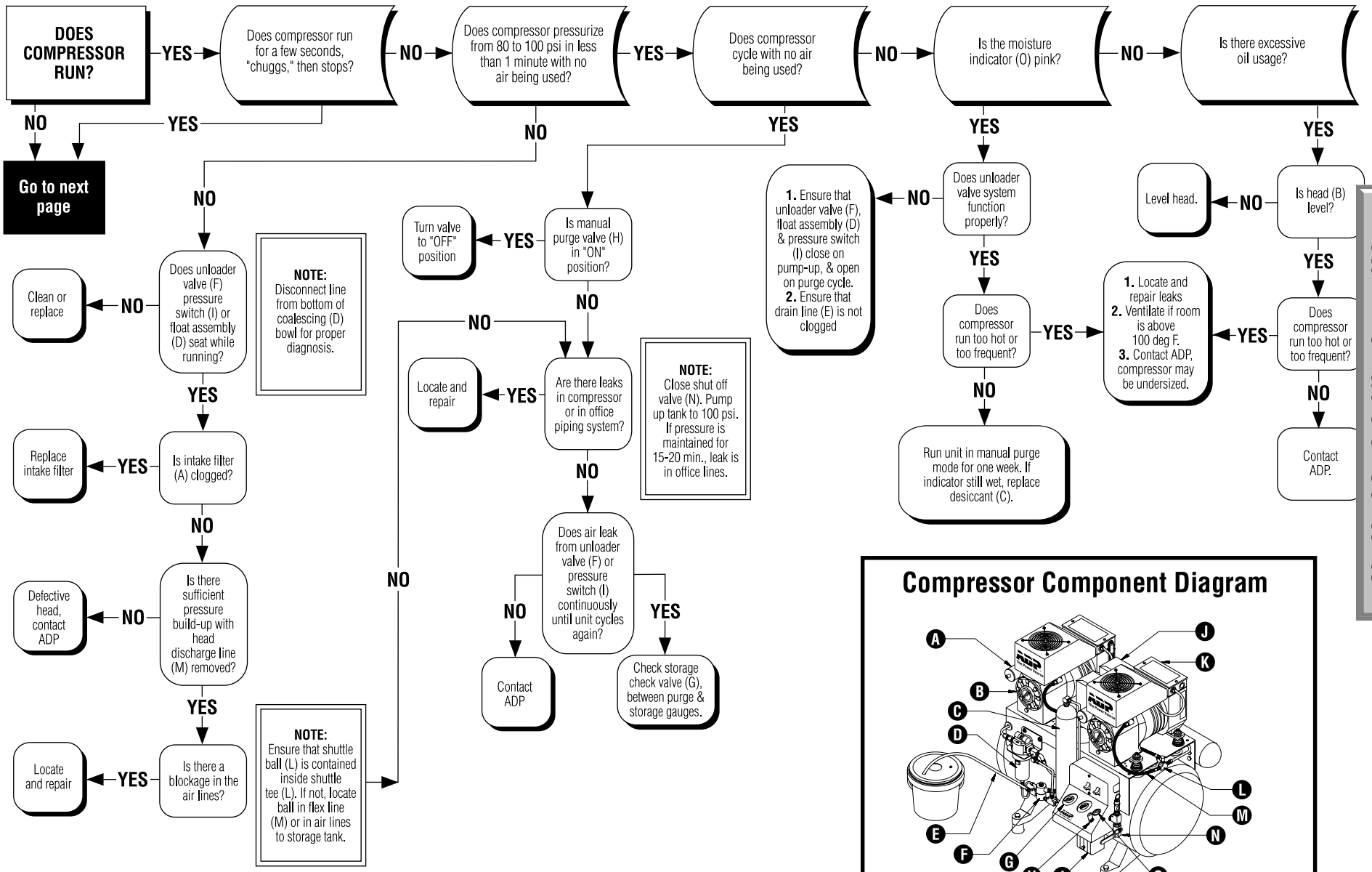
Return To Table of Contents

Standard Model
Single Head Lubricated

Item	Description	Quantity	SL11	SL12	SL21	SL22
1	Filter, Air Intake*	1	ACP90500	ACP90500	ACP90500	ACP90500
2	Assembly, Capacitor Relay	1	SPD95275	SPD95286	SPD95280	SPD95291
2a	Capacitor, Start	1	HCA30626	HCA30625	HCA30628	HCA30625
2b	Capacitor, Run	1	—	HCA30621	HCA30620	HCA30622
2c	Relay, Potential	1	HCA30652	HCA30653	HCA30654	HCA30655
3	Level, Bubble	1	MMS70400	MMS70400	MMS70400	MMS70400
4	Assembly, Ultrair Complete	1	ACA70305	ACA70305	ACA70305	ACA70305
4a	Element, .01 Micron*	1	ACA86050	ACA86050	ACA86050	ACA86050
4b	Element, Float	1	ACA85210	ACA85210	ACA85210	ACA85210
4c	Indicator, Differential Pressure	1	AAP85210	AAP85210	AAP85210	AAP85210
5	Bracket, Ultrair	1	MBS70107	MBS70107	MBS70107	MBS70107
6	Switch, ON/OFF	1	ECS10417	ECS10417	ECS10417	ECS10417
7	Assembly, Check Valve	1	SPA96100	SPA96100	SPA96100	SPA96100
7a	Gauge, Air Pressure	1	PGA70400	PGA70400	PGA70400	PGA70400
7b	Valve Ball, 3/8"	1	PVV50500	PVV50500	PVV50500	PVV50500
7c	Valve, Check 3/8"	1	PVV50515	PVV50515	PVV50515	PVV50515
7d	Valve, Safety 125 PSI	1	PVV50560	PVV50560	PVV50560	PVV50560
8	Switch, Pressure	1	ECS10445	ECS10445	ECS10445	ECS10445
9	Guard, Fan	1	MMS70200	MMS70200	MMS70200	MMS70200
10	Shroud, Fan	1	ACP70205	ACP70205	ACP70205	ACP70205
11	Assembly, Fan (w/ Bracket)	1	SEA95240	SEA95245	SEA95240	SEA95245
11a	Fan	1	SEA95535	SEA95540	SEA95535	SEA95540
11b	Bracket, Fan	2	MBS70102	MBS70102	MBS70102	MBS70102
12	Flare Fitting	1	PCB50125	PCB50125	PCB50125	PCB50125
13	Hose, Flex 12"	1	PCH50206	PCH50206	PCH50206	PCH50206
14	Assy., Comp. Head (w/ Oil & Cap. Assy.)	1	ACH95445	ACH95450	ACH95455	ACH95460
14a	Oil, 16 oz. Bottle*	1	ACA85921	ACA85921	ACA85921	ACA85921
14b	Kit, Sight Glass Repair	1	ACA85322	ACA85322	ACA85322	ACA85322
15	Kit, Motor Mount	1	HCA30900	HCA30900	HCA30900	HCA30900
16	Tank, Receiver (7 gal. & 10 gal.)	1	TST90303	TST90303	TST90307	TST90307
17	Hose, 5' X 3/8"	1	ACA85955	ACA85955	ACA85955	ACA85955
18	Foot, Rubber	4	ACA85975	ACA85975	ACA85975	ACA85975
19	Maintenance Kit	1	ACA85400	ACA85400	ACA85400	ACA85400

*** Parts Included In Maintenance Kit**

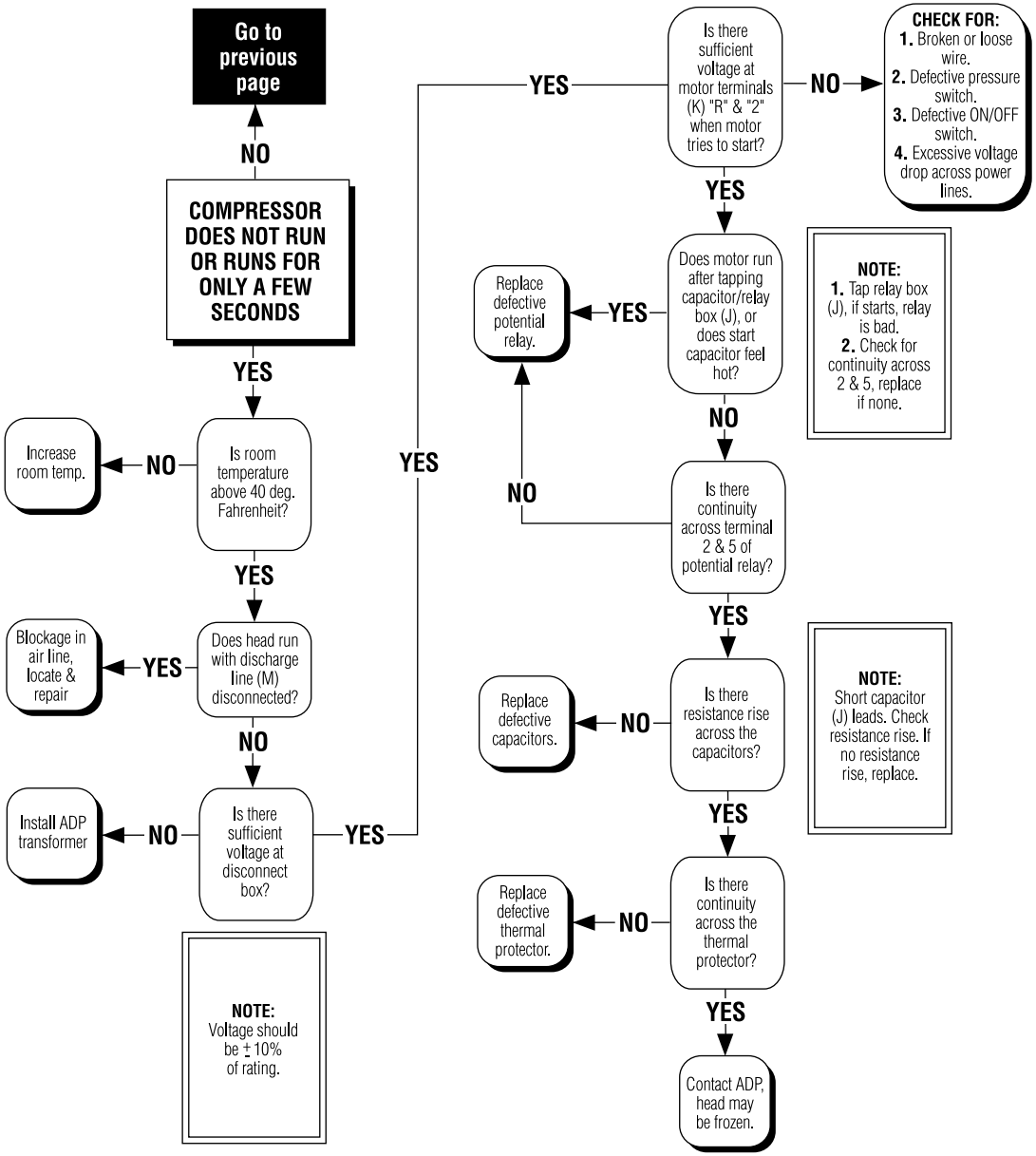
Trouble-Shooting Chart
Twin Head Lubricated Compressor


DOES COMPRESSOR RUN?
YES
Does compressor run for a few seconds, "chuggs," then stops?
NO
Does compressor pressurize from 80 to 100 psi in less than 1 minute with no air being used?
YES
Does compressor cycle with no air being used?
NO
Is the moisture indicator (O) pink?
NO
Is there excessive oil usage?
NO
Go to next page
YES
NO
Does unloader valve (F) pressure switch (I) or float assembly (D) seat while running?
NO
Clean or replace
YES
Is intake filter (A) clogged?
YES
Replace intake filter
NO
Is there sufficient pressure build-up with head discharge line (M) removed?
NO
Defective head, contact ADP
YES
Is there a blockage in the air lines?
YES
Locate and repair
NOTE: Disconnect line from bottom of coalescing (D) bowl for proper diagnosis.
NOTE: Ensure that shuttle ball (L) is contained inside shuttle tee (L). If not, locate ball in flex line (M) or in air lines to storage tank.
NO
YES
Is manual purge valve (H) in "ON" position?
YES
Turn valve to "OFF" position
NO
Are there leaks in compressor or in office piping system?
YES
Locate and repair
NO
Does air leak from unloader valve (F) or pressure switch (I) continuously until unit cycles again?
NO
Contact ADP
YES
Check storage check valve (G), between purge & storage gauges.
NOTE: Close shut off valve (N). Pump up tank to 100 psi. If pressure is maintained for 15-20 min., leak is in office lines.
YES
Does unloader valve system function properly?
NO
1. Ensure that unloader valve (F), float assembly (D) & pressure switch (I) close on pump-up, & open on purge cycle.
2. Ensure that drain line (E) is not clogged
YES
Does compressor run too hot or too frequent?
YES
1. Locate and repair leaks
2. Ventilate if room is above 100 deg F.
3. Contact ADP, compressor may be undersized.
NO
Run unit in manual purge mode for one week. If indicator still wet, replace desiccant (C).
YES
Is head (B) level?
NO
Level head.
YES
Does compressor run too hot or too frequent?
YES
NO
Contact ADP.

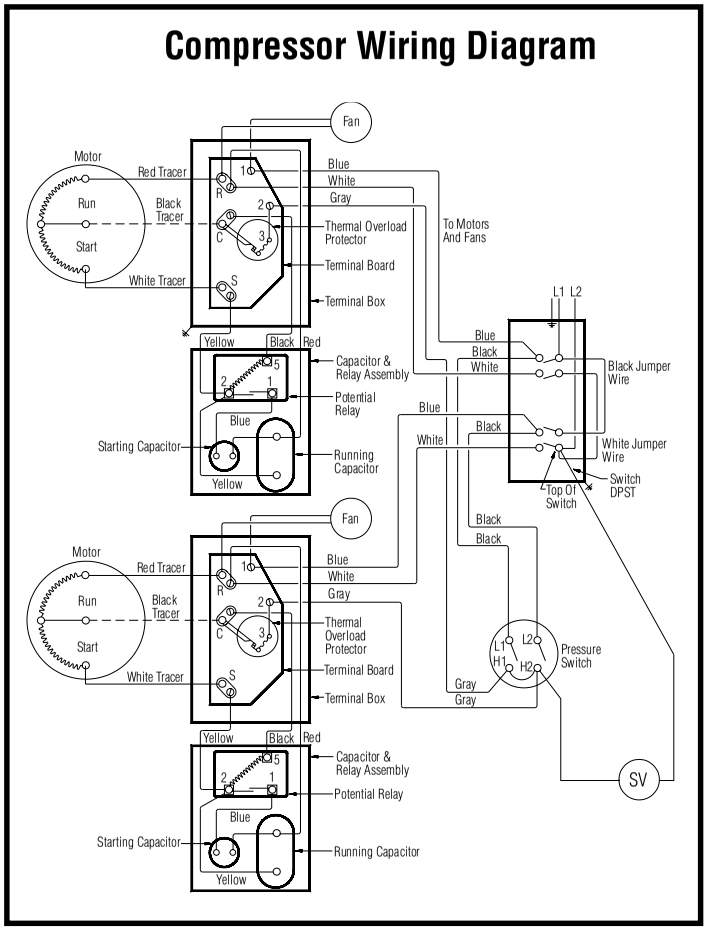
Compressor Component Diagram

Return To Table of Contents

Trouble-Shooting Chart
Twin Head Lubricated Compressor

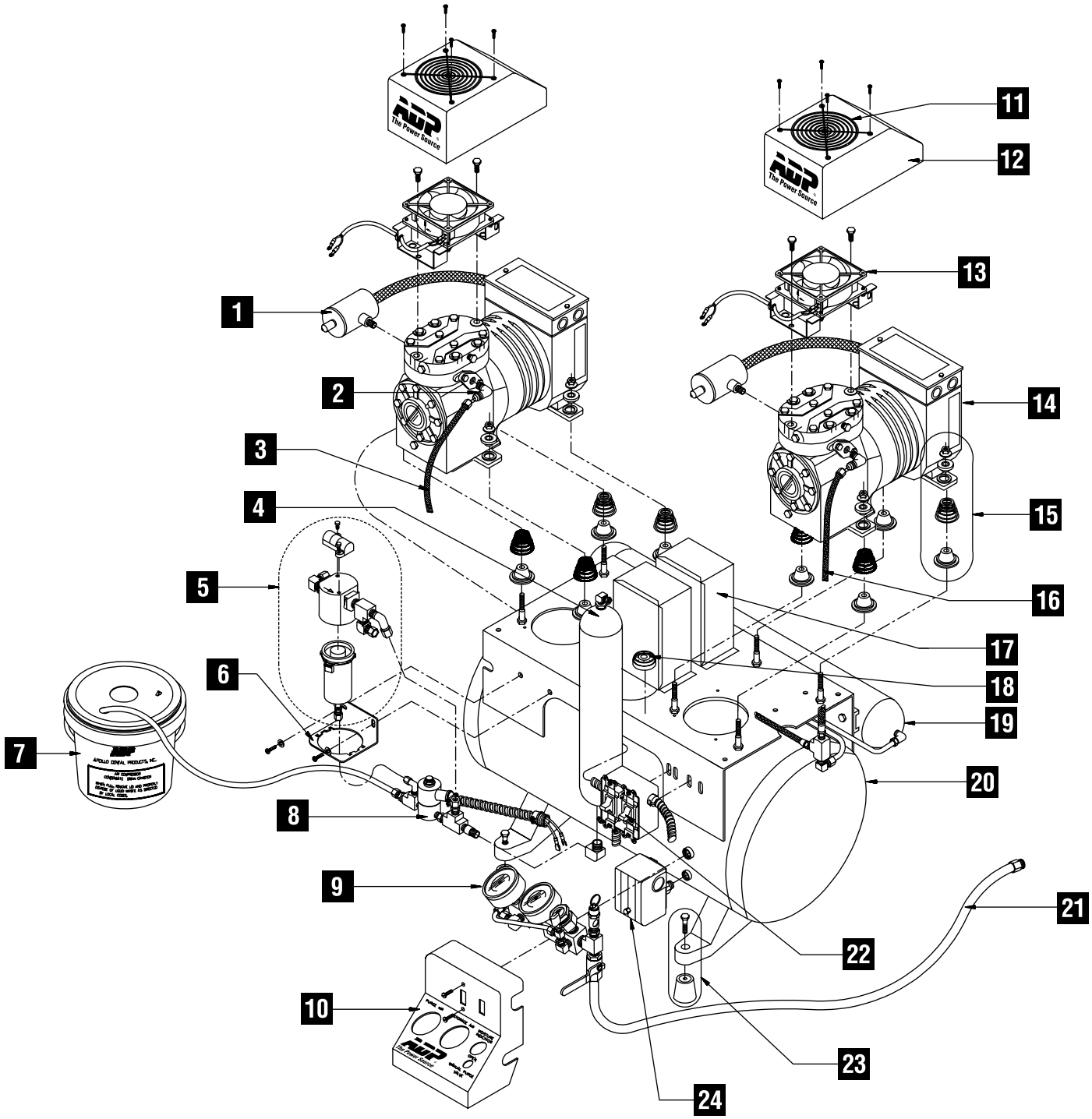

Go to previous page
NO
COMPRESSOR DOES NOT RUN OR RUNS FOR ONLY A FEW SECONDS
YES
Is room temperature above 40 deg. Fahrenheit?
NO
Increase room temp.
YES
Does head run with discharge line (M) disconnected?
YES
Blockage in air line, locate & repair
NO
Is there sufficient voltage at disconnect box?
NO
Install ADP transformer
YES
NOTE: Voltage should be ± 10% of rating.
YES
Is there sufficient voltage at motor terminals (K) "R" & "2" when motor tries to start?
NO
CHECK FOR:
1. Broken or loose wire.
2. Defective pressure switch.
3. Defective ON/OFF switch.
4. Excessive voltage drop across power lines.
YES
Does motor run after tapping capacitor/relay box (J), or does start capacitor feel hot?
YES
Replace defective potential relay.
NO
NOTE:
1. Tap relay box (J), if starts, relay is bad.
2. Check for continuity across 2 & 5, replace if none.
NO
Is there continuity across terminal 2 & 5 of potential relay?
YES
Is there resistance rise across the capacitors?
NO
Replace defective capacitors.
YES
NOTE: Short capacitor (J) leads. Check resistance rise. If no resistance rise, replace.
Is there continuity across the thermal protector?
NO
Replace defective thermal protector.
YES
Contact ADP, head may be frozen.

Compressor Wiring Diagram



Return To Table of Contents

Desiccant Model
Twin Head Lubricated



Return To Table of Contents

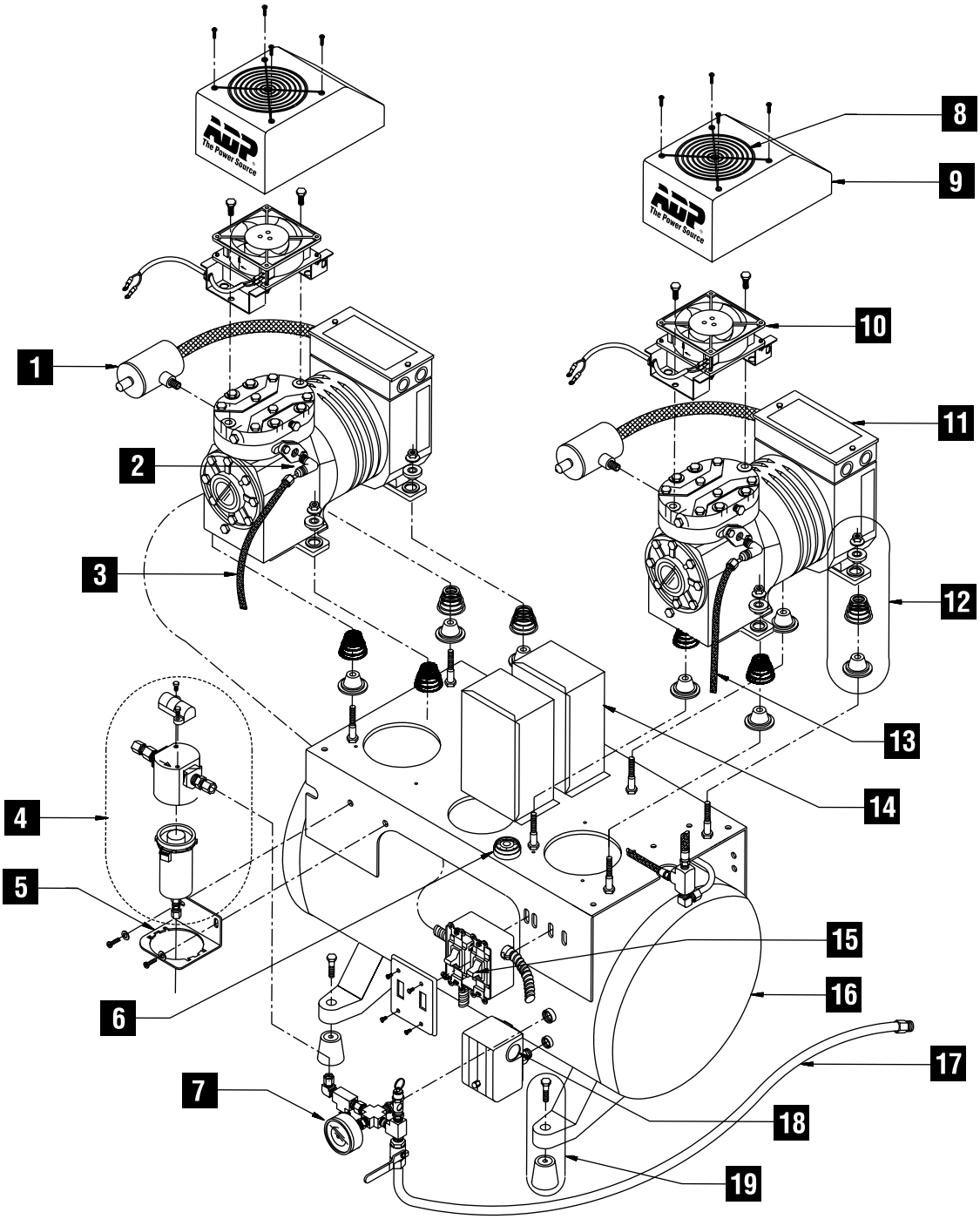
Desiccant Model
Twin Head Lubricated

Item	Description	Quantity	TL31D	TL32D	TL41D	TL42D
1	Filter, Air Intake*	2	ACP90500	ACP90500	ACP90500	ACP90500
2	Elbow, Flare Fitting	2	PCB50125	PCB50125	PCB50125	PCB50125
3	Hose, Flex 21"	1	PCH50208	PCH50208	PCH50208	PCH50208
4	Assembly, Dryer Tank w/ Desiccant	1	ACA85308	ACA85308	ACA85308	ACA85308
4a	Kit, Desiccant Only Replacement	1	ACA85345	ACA85345	ACA85345	ACA85345
5	Assembly, Ultrair	1	ACA85215	ACA85215	ACA85215	ACA85215
5a	Element, .01 Micron*	1	ACA86055	ACA86055	ACA86055	ACA86055
5b	Assembly, Float	1	ACA85210	ACA85210	ACA85210	ACA85210
5c	Indicator, Differential Pressure	1	AAP85210	AAP85210	AAP85210	AAP85210
6	Bracket, Ultrair Filter - Complete	1	MBS70110	MBS70110	MBS70110	MBS70110
7	Canister, Condensate Drain	1	SPA95400	SPA95400	SPA95400	SPA95400
8	Valve, Quick Exhaust (Solenoid)	1	PVV70501	PVV70502	PVV70501	PVV70502
8a	Kit, Solenoid Repair	1	ACA85332	ACA85332	ACA85332	ACA85332
8b	Coil, Solenoid Valve	1	EC010117	ECO10118	ECO10117	WCO10118
9	Assembly, Control Cluster	1	SPA94000	SPA94000	SPA94000	SPA94000
9a	Kit, Moisture Indicator	1	ACA85965	ACA85965	ACA85965	ACA85965
9b	Gauge, Air Pressure	2	PGA70400	PGA70400	PGA70400	PGA70400
9c	Valve, Ball 3/8"	1	PVV50500	PVV50500	PVV50500	PVV50500
9d	Valve, Check 3/8"	1	PVV50515	PVV50515	PVV50515	PVV50515
9e	Valve, Manual Purge 1/4"	1	PVV50550	PVV50550	PVV50550	PVV50550
9f	Valve, Safety 125 PSI	1	PVV50560	PVV50560	PVV50560	PVV50560
10	Shroud, Cluster Panel	1	ACP70210	ACP70210	ACP70210	ACP70210
11	Guard, Fan	2	MMS70200	MMS70200	MMS70200	MMS70200
12	Shroud, Fan	2	ACP70205	ACP70205	ACP70205	ACP70205
13	Assembly, Fan (w/ Brackets)	2	SEA95240	SEA95245	ACP95240	ACP95245
13a	Fan	2	SEA95535	SEA95540	SEA95535	SEA95540
13b	Bracket, Fan	4	MBS70102	MBS70102	MBS70102	MBS70102
14	Assy., Comp. Head (w/ Oil & Cap Assy.)	1	ACH95445	ACH95450	ACH95455	ACH95460
14a	Kit, Sight Glass	2	ACA85322	ACA85322	ACA85322	ACA85322
14b	Oil, 16 oz. Bottle*	2	ACA85921	ACA85921	ACA85921	ACA85921
15	Kit, Motor Mount	2	HCA30900	HCA30900	HCA30900	HCA30900
16	Hose, Flex 12"	1	PCH50206	PCH50206	PCH50206	PCH50206
17	Assembly, Capacitor Relay	2	SPD95275	SPD95286	SPD95280	SPD95291
17a	Capacitor, Start	2	HCA30626	HCA30625	HCA30628	HCA30625
17b	Capacitor, Run	2	—	HCA30621	HCA30620	HCA30622
17c	Relay, Potential	2	HCA30652	HCA30653	HCA30654	HCA30655
18	Level, Bubble	1	MMS70400	MMS70400	MMS70400	MMS70400
19	Tank, Purge	1	STK96004	STK96004	STK96005	STK96005
20	Tank, Receiver (15 gal. & 20 gal.)	1	TST90312	TST90312	TST90317	TST90317
21	Hose, 5' X 3/8"	1	ACA85955	ACA85955	ACA85955	ACA85955
22	Switch, ON/OFF	2	ECS10417	ECS10417	ECS10417	ECS10417
23	Feet, Rubber	4	ACA85975	ACA85975	ACA85975	ACA85975
24	Switch, Pressure	1	ECS10445	ECS10445	ECS10450	ECS10445
25	Maintenance Kit	1	ACA85401	ACA85401	ACA85401	ACA85401

*** Parts Included In Maintenance Kit**

Return To Table of Contents

Standard Model
Twin Head Lubricated



Return To Table of Contents

Standard Model
Twin Head Lubricated

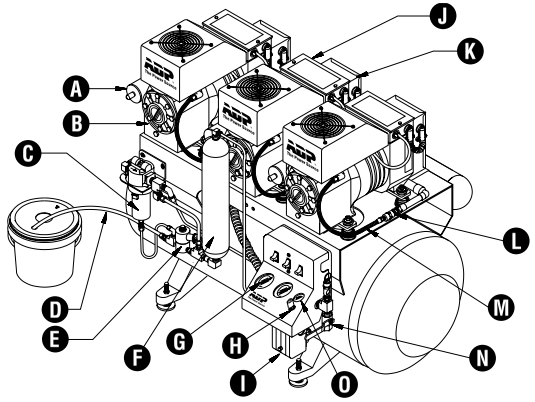
Item	Description	Quantity	TL31	TL32	TL41	TL42
1	Filter, Air Intake*	2	ACP90500	ACP90500	ACP90500	ACP90500
2	Flare Fitting	2	PCB50125	PCB50125	PCB50125	PCB50125
3	Hose, Flex 21"	1	PCH50208	PCH50208	PCH50208	PCH50208
4	Assembly, Ultrair Filter - Complete	1	ACA85215	ACA85215	ACA85215	ACA85215
4a	Element, .01 Micron*	1	ACA86055	ACA86055	ACA86055	ACA86055
4b	Assembly, Float	1	ACA85210	ACA85210	ACA85210	ACA85210
4c	Indicator, Differential Pressure	1	AAP85210	AAP85210	AAP85210	AAP85210
5	Bracket, Ultrair	1	MBS70110	MBS70110	MBS70110	MBS70110
6	Level, Bubble	1	MMS70400	MMS70400	MMS70400	MMS70400
7	Assembly, Check Valve	1	SPA96100	SPA96100	SPA96100	SPA96100
7a	Gauge, Air Pressure	1	PGA70400	PGA70400	PGA70400	PGA70400
7b	Valve, Ball 3/8"	1	PVV50500	PVV50500	PVV50500	PVV50500
7c	Valve, Check 3/8"	1	PVV50515	PVV50515	PVV50515	PVV50515
7d	Valve, Safety 125 PSI	1	PVV50560	PVV50560	PVV50560	PVV50560
8	Guard, Fan	2	MMS70200	MMS70200	MMS70200	MMS70200
9	Shroud, Fan	2	ACP70205	ACP70205	ACP70205	ACP70205
10	Assembly, Fan (w/ Brackets)	2	SEA95240	SEA95245	SEA95240	SEA95245
10a	Fan	2	SEA95535	SEA95540	SEA95535	SEA95540
10b	Bracket, Fan	4	MBS70102	MBS70102	MBS70102	MBS70102
11	Assy., Comp. Head (w/ Oil & Cap. Assy.)	2	ACH95445	ACH95450	ACH95455	ACH95460
11a	Kit, Sight Glass	2	ACA85322	ACA85322	ACA85322	ACA85322
11b	Oil, 16 oz. Bottle*	2	ACA85921	ACA85921	ACA85921	ACA85921
12	Kit, Motor Mount	2	HCA30900	HCA30900	HCA30900	HCA30900
13	Hose, Flex 12"	1	PCH50206	PCH50206	PCH50206	PCH50206
14	Assembly, Capacitor/Relay	2	SPD95275	SPD95286	SPD95280	SPD95291
14a	Capacitor, Start	2	HCA30626	HCA30625	HCA30628	HCA30625
14b	Capacitor/Run	2	—	HCA30621	HCA30620	HCA30622
14c	Relay, Potential	2	HCA30652	HCA30653	HCA30654	HCA30655
15	Switch, ON/OFF	2	ECS10417	ECS10417	ECS10417	ECS10417
16	Tank, Receiver (15 gal. & 20 gal.)	1	TST90312	TST90312	TST90317	TST90317
17	Hose, 5' X 3/8"	1	ACA85955	ACA85955	ACA85955	ACA85955
18	Switch, Pressure	1	ECS10445	ECS10450	ECS10455	ECS10460
19	Feet, Rubber	4	ACA85975	ACA85975	ACA85975	ACA85975
20	Maintenance Kit	1	ACA85401	ACA85401	ACA85401	ACA85401

*** Parts Included In Maintenance Kit**

Trouble-Shooting Chart
Triple Head Lubricated Compressor

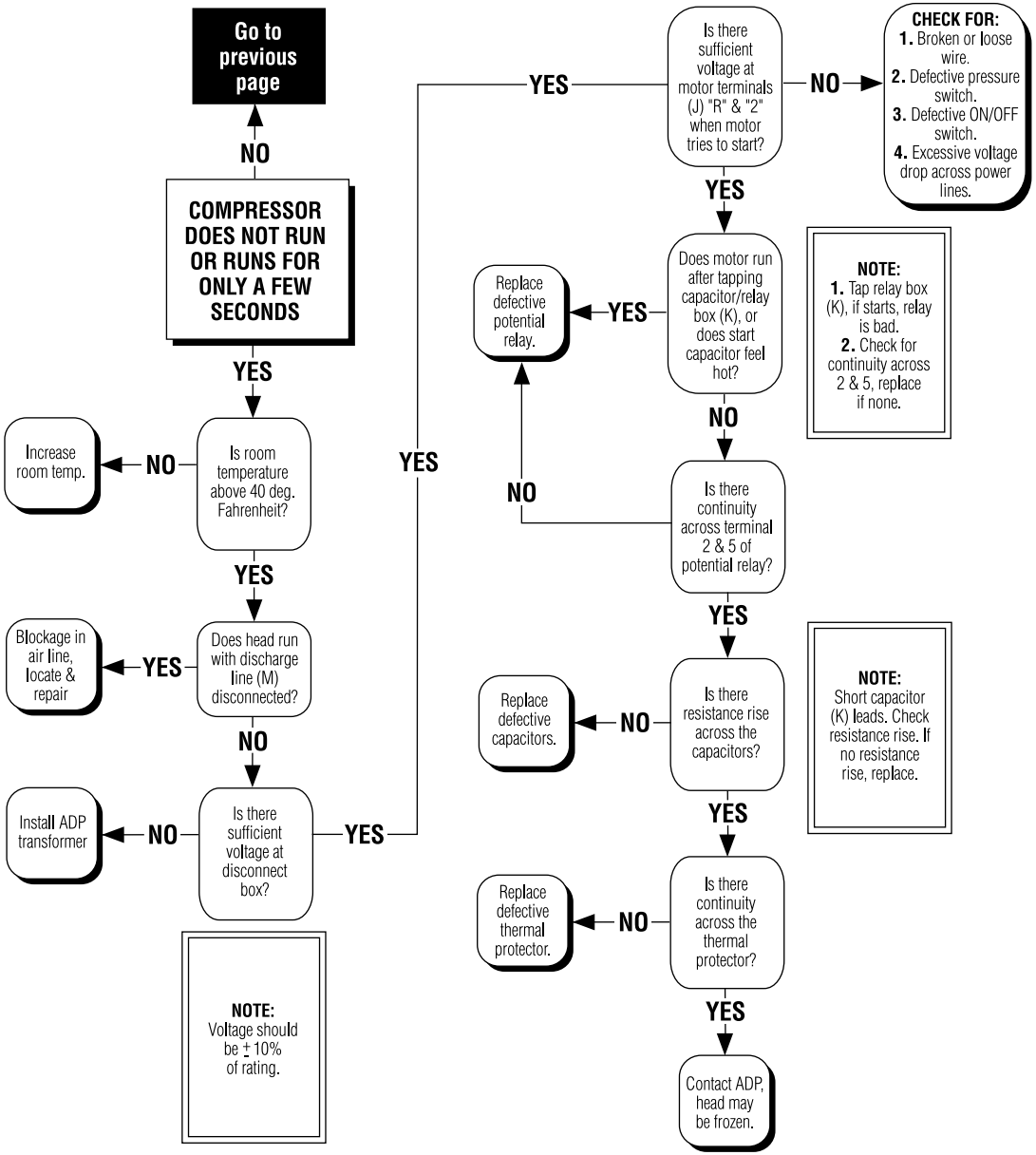
DOES COMPRESSOR RUN?
- YES → Does compressor run for a few seconds, "chuggs," then stops?
  - YES → Go to next page
  - NO → Does unloader valve (E) pressure switch (I) or float assembly (C) seat while running?
    - NO → Clean or replace
    - YES → Is intake filter (A) clogged?
      - YES → Replace intake filter
      - NO → Is there sufficient pressure build-up with head discharge line (M) removed?
        - NO → Defective head, contact ADP
        - YES → Is there a blockage in the air lines?
          - YES → Locate and repair
          - NO → **NOTE:** Inspect check valves (L) for build-up that can clog and restrict air flow.
    - **NOTE:** Disconnect line from bottom of coalescing (C) bowl for proper diagnosis.
- NO → Does compressor pressurize from 80 to 100 psi in less than 1 minute with no air being used?
  - YES → Does compressor cycle with no air being used?
    - NO → Is the moisture indicator (O) pink?
      - NO → Is there excessive oil usage?
        - YES → Is head (B) level?
          - NO → Level head.
          - YES → Does compressor run too hot or too frequent?
            - YES → 1. Locate and repair leaks 2. Ventilate if room is above 100 deg F. 3. Contact ADP, compressor may be undersized.
            - NO → Contact ADP.
        - NO → Does unloader valve system function properly?
          - NO → 1. Ensure that unloader valve (E), float assembly (C) & pressure switch (I) close on pump-up, & open on purge cycle. 2. Ensure that drain line (D) is not clogged
          - YES → Does compressor run too hot or too frequent?
            - YES → 1. Locate and repair leaks 2. Ventilate if room is above 100 deg F. 3. Contact ADP, compressor may be undersized.
            - NO → Run unit in manual purge mode for one week. If indicator still wet, replace desiccant (F).
    - YES → Is manual purge valve (H) in "ON" position?
      - YES → Turn valve to "OFF" position
      - NO → Are there leaks in compressor or in office piping system?
        - YES → Locate and repair
        - NO → Does air leak from unloader valve (E) or pressure switch (I) continuously until unit cycles again?
          - NO → Contact ADP
          - YES → Check storage check valve (G), between purge & storage gauges.
      - **NOTE:** Close shut off valve (N). Pump up tank to 100 psi. If pressure is maintained for 15-20 min., leak is in office lines.
  - NO → (to Inspect check valves (L) for build-up that can clog and restrict air flow.)
- YES → (to Inspect check valves (L) for build-up that can clog and restrict air flow.)

Compressor Component Diagram

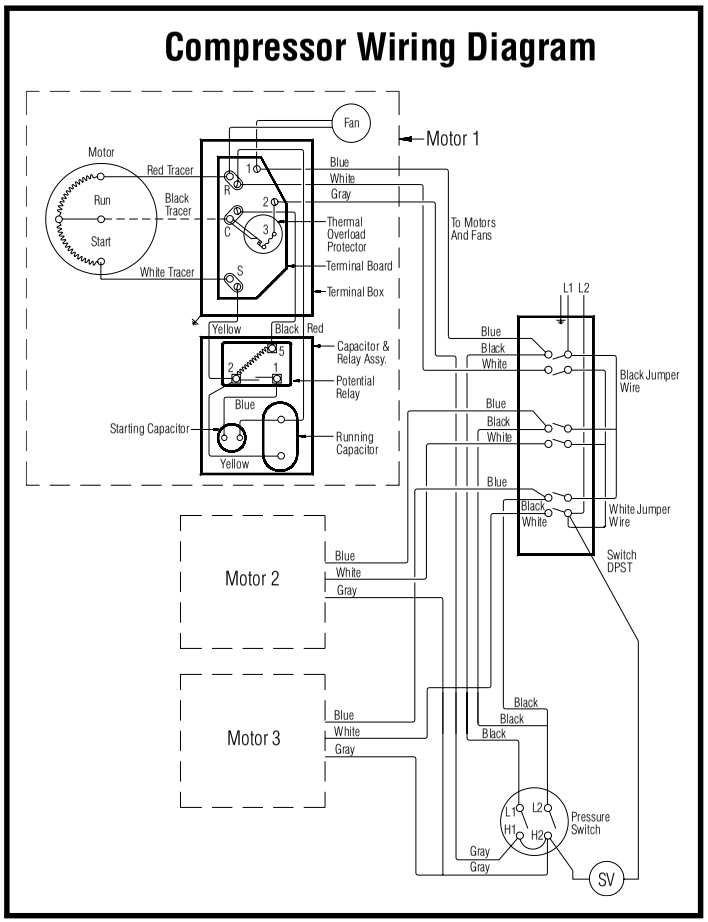


Return To Table of Contents

Trouble-Shooting Chart
Triple Head Lubricated Compressor


Go to previous page
NO
COMPRESSOR DOES NOT RUN OR RUNS FOR ONLY A FEW SECONDS
YES
Is room temperature above 40 deg. Fahrenheit?
NO
Increase room temp.
YES
Does head run with discharge line (M) disconnected?
YES
Blockage in air line, locate & repair
NO
Is there sufficient voltage at disconnect box?
NO
Install ADP transformer
YES
NOTE: Voltage should be ± 10% of rating.
YES
Is there sufficient voltage at motor terminals (J) "R" & "2" when motor tries to start?
NO
CHECK FOR:
1. Broken or loose wire.
2. Defective pressure switch.
3. Defective ON/OFF switch.
4. Excessive voltage drop across power lines.
YES
Does motor run after tapping capacitor/relay box (K), or does start capacitor feel hot?
YES
Replace defective potential relay.
NOTE:
1. Tap relay box (K), if starts, relay is bad.
2. Check for continuity across 2 & 5, replace if none.
NO
Is there continuity across terminal 2 & 5 of potential relay?
NO
YES
Is there resistance rise across the capacitors?
NO
Replace defective capacitors.
NOTE: Short capacitor (K) leads. Check resistance rise. If no resistance rise, replace.
YES
Is there continuity across the thermal protector?
NO
Replace defective thermal protector.
YES
Contact ADP, head may be frozen.

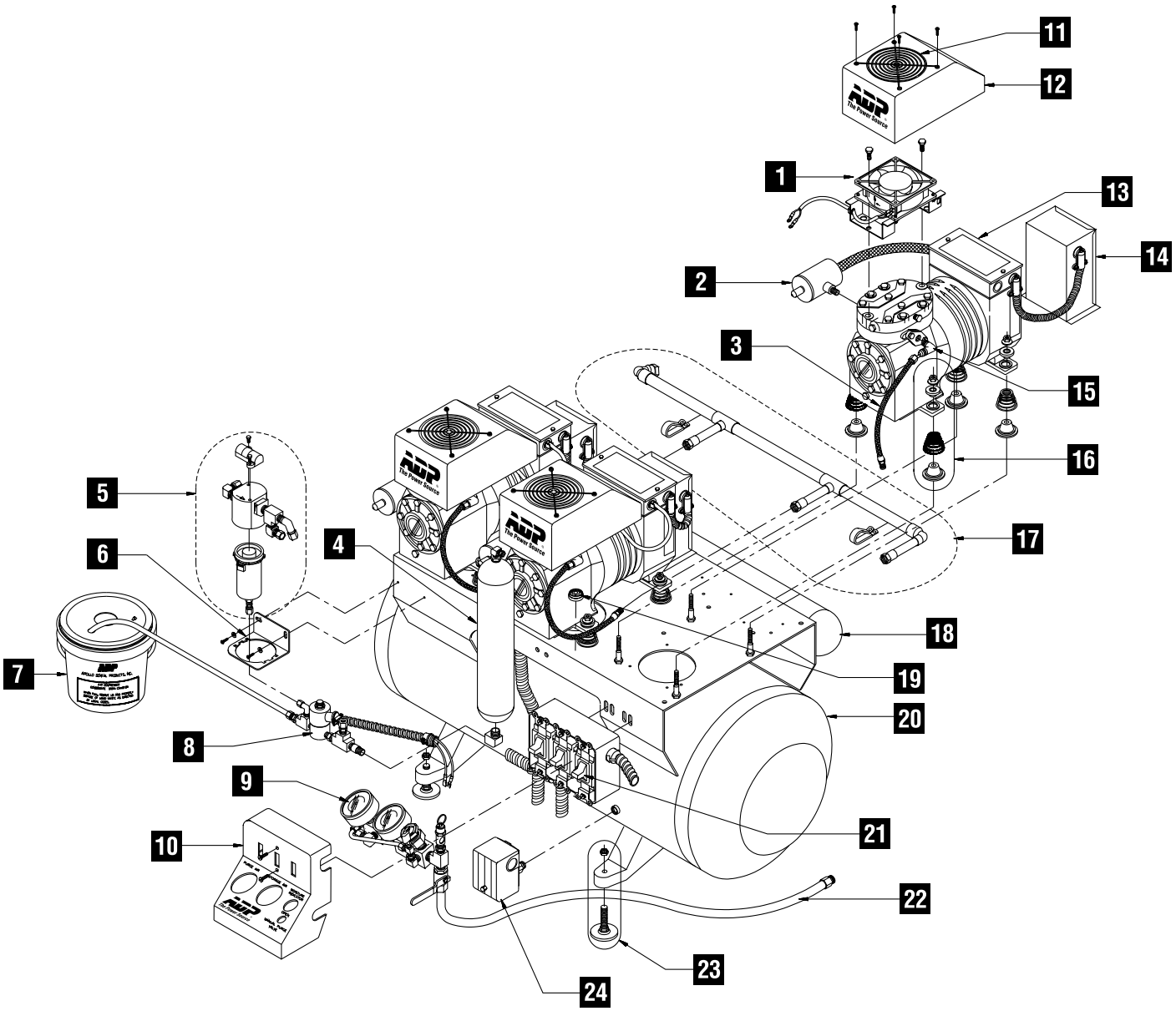
Compressor Wiring Diagram



Return To Table of Contents

Return To Table of Contents

Desiccant Model
Triple Head Lubricated



Return To Table of Contents

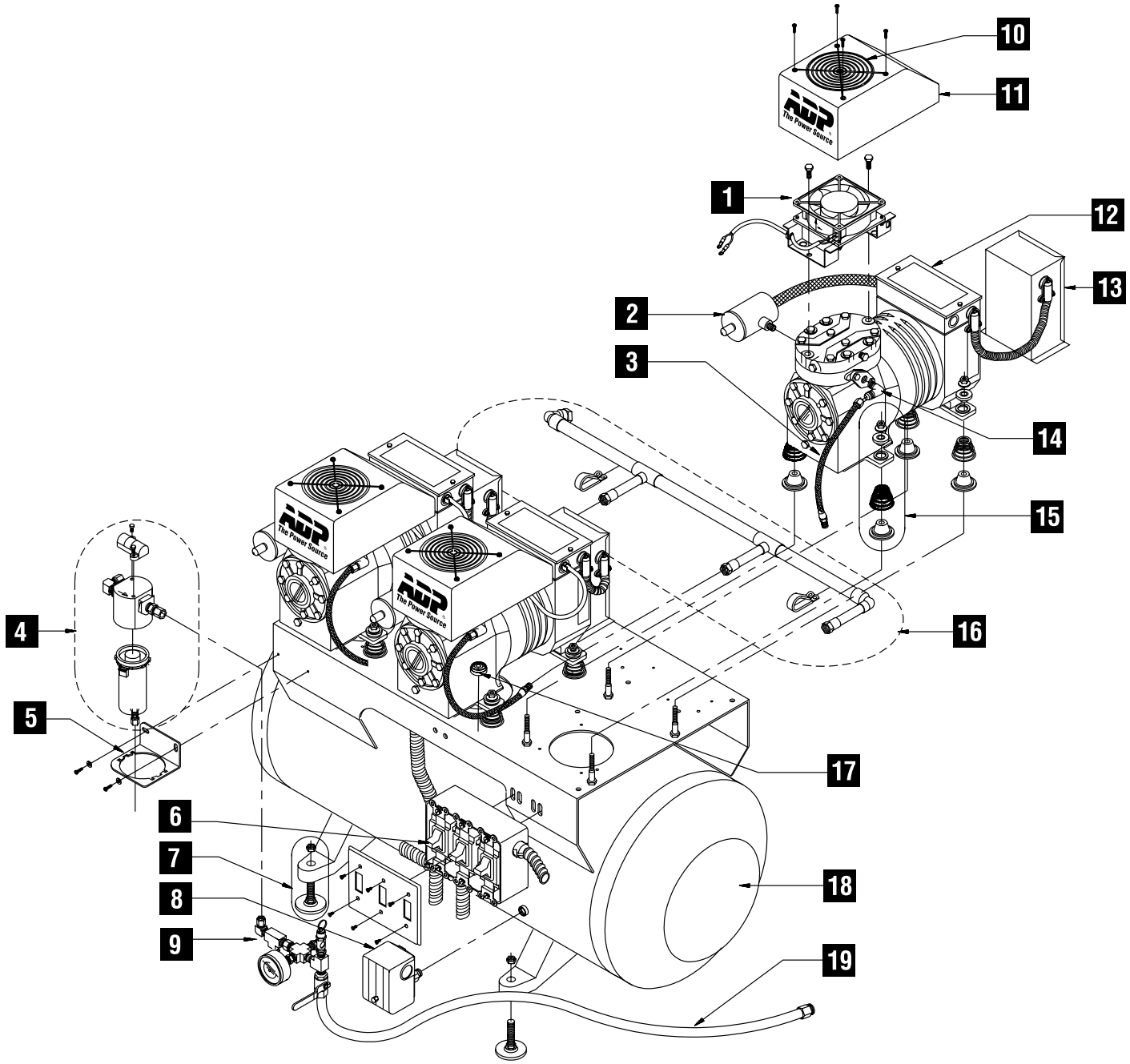
Desiccant Model
Triple Head Lubricated

Item	Description	Quantity	RL62D
1	Assembly Fan (w/ Brackets)	3	SEA95245
1a	Fan	3	SEA95540
1b	Bracket, Fan	6	MBS70102
2	Filter, Air Intake*	3	ACP90500
3	Hose, Flex 12"	3	PCH50206
4	Assembly, Dryer Tank w/ Desiccant	1	ACA85301
4a	Kit, Desiccant Only Replacement	1	ACA85345
5	Assembly, Ultrair Complete	1	ACA85215
5a	Element, .01 Micron*	1	ACA86055
5b	Assembly, Float	1	ACA85210
5c	Indicator, Differential Pressure	1	AAP85210
6	Bracket, Ultrair	1	MBS70110
7	Canister, Condensate Drain	1	SPA95400
8	Valve, Quick Exhaust (Solenoid)	1	PVV70502
8a	Kit, Solenoid Repair	1	ACA85332
8b	Coil, Solenoid Valve	1	ECO10118
9	Assembly, Control Cluster	1	SPA94001
9a	Kit, Moisture Indicator	1	ACA85965
9b	Gauge, Air Pressure	2	PGA70400
9c	Valve, Ball 3/8"	1	PVV50500
9d	Valve, Check 3/8"	1	PVV50515
9e	Valve, Manual Purge	1	PVV50550
9f	Valve, Safety 125 PSI	1	PVV50560
10	Shroud, Cluster Panel	1	ACP70210
11	Guard, Fan	3	MMS70200
12	Shroud, Fan	3	ACP70205
13	Assy., Comp. Head (w/ Oil Cap. & Cap. Assy.)	3	ACH95460
13a	Kit, Sight Glass Repair	3	ACA85322
13b	Oil, 16 oz. Bottle*	3	ACA85921
14	Assembly, Capacitor/Relay	3	SPD95291
14a	Capacitor, Start	3	HCA30625
14b	Capacitor, Run	3	HCA30622
14c	Relay, Potential	3	HCA30655
15	Flare Fitting	3	PCB50125
16	Kit, Motor Mount	3	HCA30900
17	Assembly, Manifold	1	SPA95205
18	Tank, Purge	1	STK96006
19	Level, Bubble	1	MMS70400
20	Tank Receiver (30 gal.)	1	TST90322
21	Switch, ON/OFF	3	ECS10417
22	Hose, 5' X 3/8"	1	ACA85955
23	Feet, Neoprene	4	MRP70969
24	Switch, Pressure	1	ECS10450
25	Maintenance Kit	1	ACA85202

*** Parts Included In Maintenance Kit**

Return To Table of Contents

Standard Model
Triple Head Lubricated



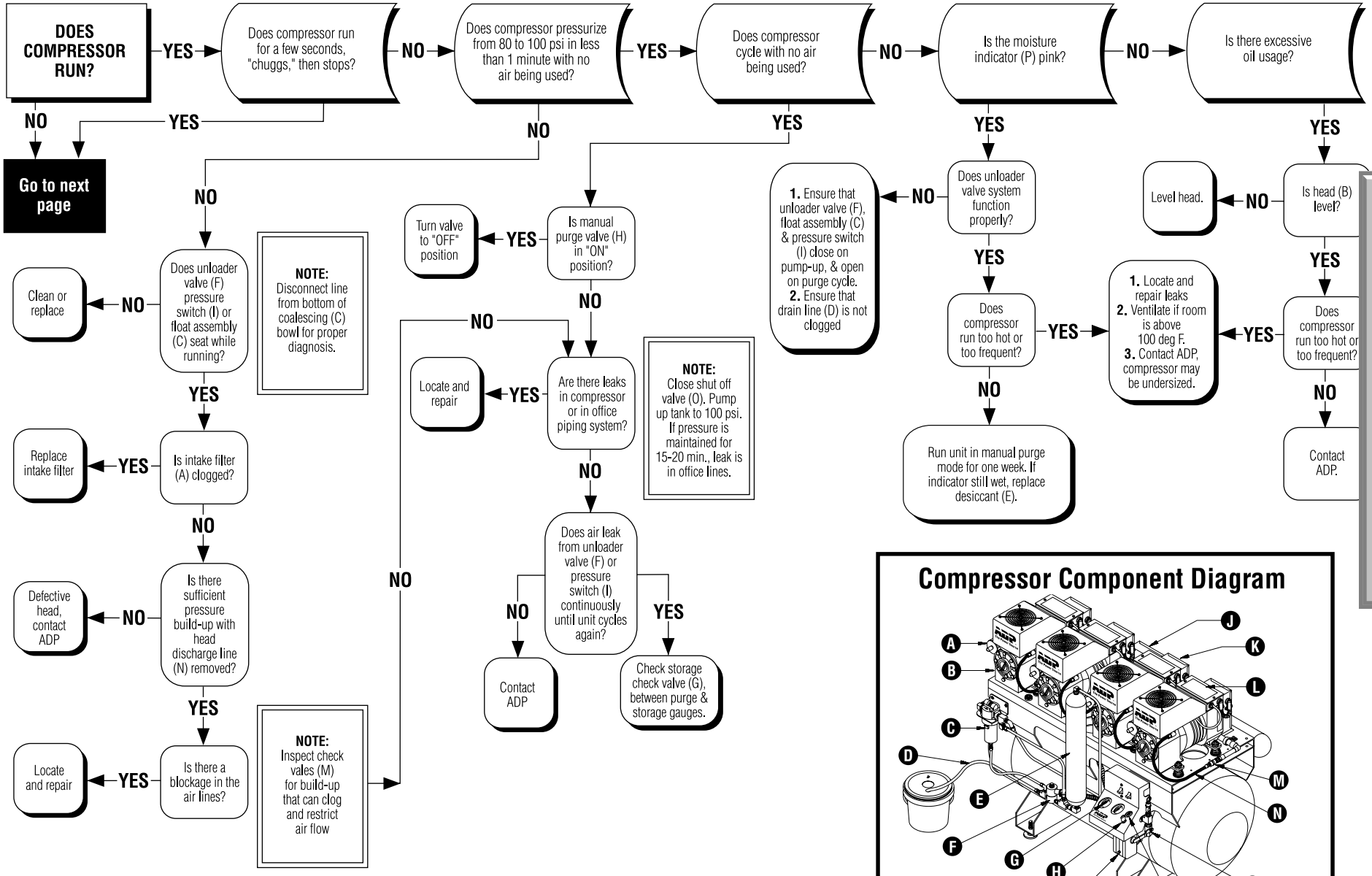
Return To Table of Contents

Standard Model
Triple Head Lubricated

Item	Description	Quantity	RL62
1	Assembly, Fan (w/ Brackets)	3	SEA95245
1a	Fan	3	SEA95540
1b	Bracket, Fan	6	MBS70102
2	Filter, Air Intake*	3	ACP90500
3	Hose, Flex 12”	3	PCH50206
4	Assembly, Ultrair Complete	1	ACA85215
4a	Element, .01 Micron Ultrair*	1	ACA86055
4b	Assembly, Float	1	ACA85210
4c	Indicator, Differential Pressure	1	AAP85210
5	Bracket, Ultrair	1	MBS70110
6	Switch, ON/OFF	3	ECS10417
7	Feet, Neoprene	4	MRP70969
8	Switch, Pressure	1	ECS10450
9	Assembly, Check Valve	1	SPA96100
9a	Gauge, Air Pressure	1	PGA70400
9b	Valve, Ball 3/8”	1	PVV50500
9c	Valve, Check 3/8”	1	PVV50515
9d	Valve, Safety 125 PSI	1	PVV50560
10	Guard, Fan	3	MMS70200
11	Shroud, Fan	3	ACP70205
12	Assy, Comp. Head (w/ Oil & Cap. Assy.)	3	ACH95460
12a	Kit, Sight Glass	1	ACA85322
12b	Oil, 16 oz. Bottle*	3	ACA85921
13	Assembly, Capacitor/Relay	3	SPD95291
13a	Capacitor, Start	3	HCA30625
13b	Capacitor, Run	3	HCA30622
13c	Relay, Potential	3	HCA30655
14	Flare Fitting	3	PCB50125
15	Kit, Motor Mount	3	HCA30900
16	Assembly, Manifold	1	SPA95205
17	Level, Bubble	1	MMS70400
18	Tank, Receiver (30 gal.)	1	TST90322
19	Hose, 5’ x 3/8”	1	ACA85955
20	Maintenance Kit	1	ACA85402

*** Parts Included In Maintenance Kit**

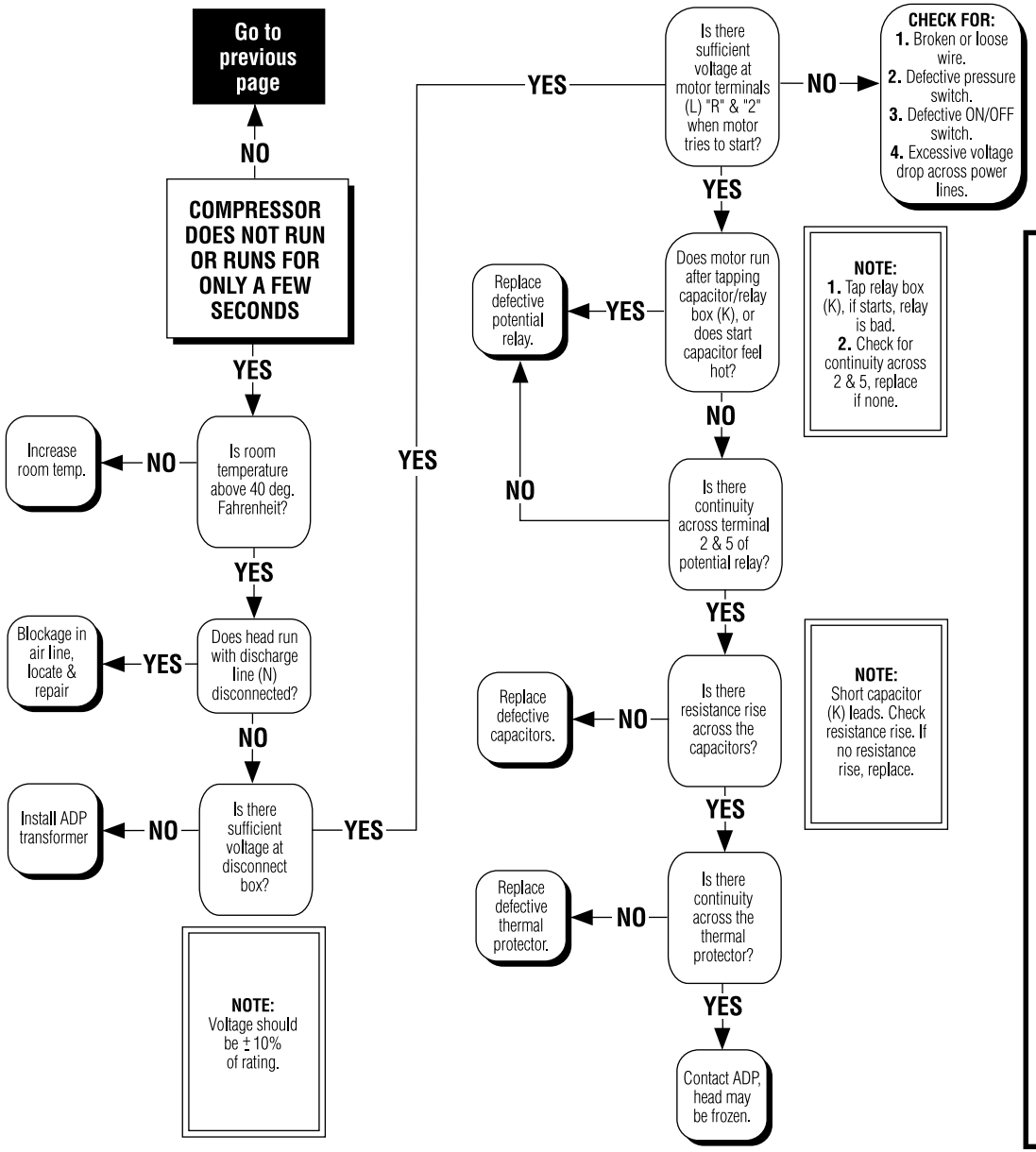
Trouble-Shooting Chart
Quad Head Lubricated Compressor


DOES COMPRESSOR RUN?
YES
Does compressor run for a few seconds, "chuggs," then stops?
NO
Does compressor pressurize from 80 to 100 psi in less than 1 minute with no air being used?
YES
Does compressor cycle with no air being used?
NO
Is the moisture indicator (P) pink?
NO
Is there excessive oil usage?
NO
Go to next page
YES
NO
Does unloader valve (F) pressure switch (I) or float assembly (C) seat while running?
NO
Clean or replace
YES
Is intake filter (A) clogged?
YES
Replace intake filter
NO
Is there sufficient pressure build-up with head discharge line (N) removed?
NO
Defective head, contact ADP
YES
Is there a blockage in the air lines?
YES
Locate and repair
NOTE: Disconnect line from bottom of coalescing (C) bowl for proper diagnosis.
NOTE: Inspect check vales (M) for build-up that can clog and restrict air flow
NO
Is manual purge valve (H) in "ON" position?
YES
Turn valve to "OFF" position
NO
Are there leaks in compressor or in office piping system?
YES
Locate and repair
NO
Does air leak from unloader valve (F) or pressure switch (I) continuously until unit cycles again?
NO
Contact ADP
YES
Check storage check valve (G), between purge & storage gauges.
NOTE: Close shut off valve (O). Pump up tank to 100 psi. If pressure is maintained for 15-20 min., leak is in office lines.
YES
Does unloader valve system function properly?
NO
1. Ensure that unloader valve (F), float assembly (C) & pressure switch (I) close on pump-up, & open on purge cycle.
2. Ensure that drain line (D) is not clogged
YES
Does compressor run too hot or too frequent?
YES
1. Locate and repair leaks
2. Ventilate if room is above 100 deg F.
3. Contact ADP, compressor may be undersized.
NO
Run unit in manual purge mode for one week. If indicator still wet, replace desiccant (E).
YES
Is head (B) level?
NO
Level head.
YES
Does compressor run too hot or too frequent?
YES
NO
Contact ADP.

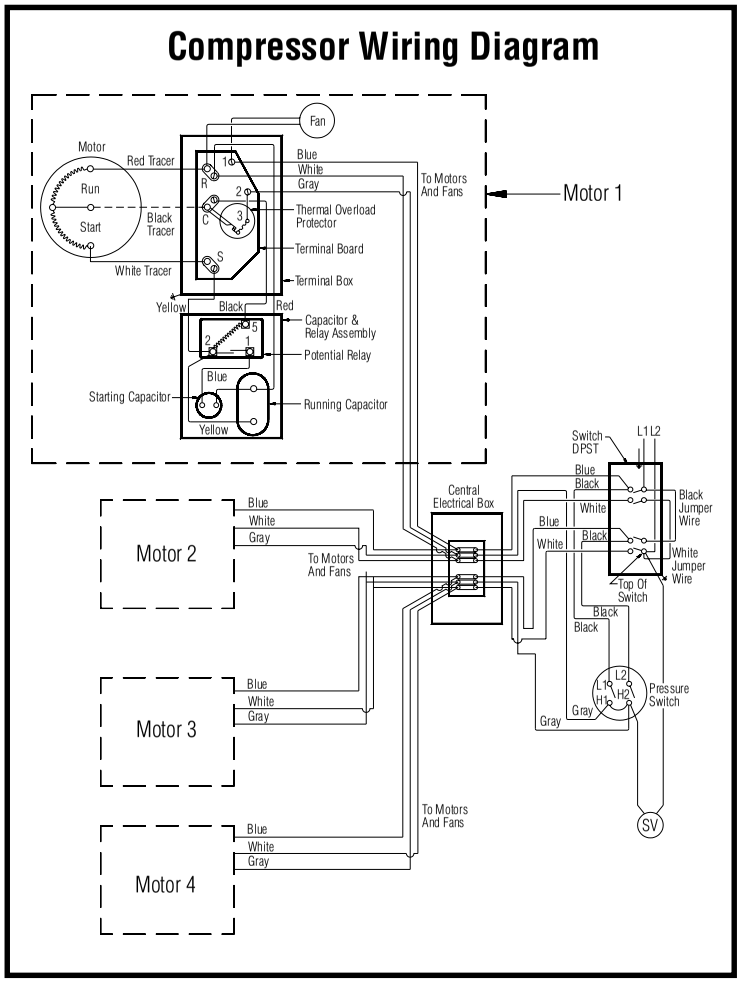
Compressor Component Diagram

Return To Table of Contents

Trouble-Shooting Chart
Quad Head Lubricated Compressor


Go to previous page
NO
COMPRESSOR DOES NOT RUN OR RUNS FOR ONLY A FEW SECONDS
YES
Is room temperature above 40 deg. Fahrenheit?
NO
Increase room temp.
YES
Does head run with discharge line (N) disconnected?
YES
Blockage in air line, locate & repair
NO
Is there sufficient voltage at disconnect box?
NO
Install ADP transformer
YES
NOTE: Voltage should be ± 10% of rating.
YES
Is there sufficient voltage at motor terminals (L) "R" & "2" when motor tries to start?
NO
CHECK FOR:
1. Broken or loose wire.
2. Defective pressure switch.
3. Defective ON/OFF switch.
4. Excessive voltage drop across power lines.
YES
Does motor run after tapping capacitor/relay box (K), or does start capacitor feel hot?
YES
Replace defective potential relay.
NO
NOTE:
1. Tap relay box (K), if starts, relay is bad.
2. Check for continuity across 2 & 5, replace if none.
NO
Is there continuity across terminal 2 & 5 of potential relay?
YES
Is there resistance rise across the capacitors?
NO
Replace defective capacitors.
YES
NOTE: Short capacitor (K) leads. Check resistance rise. If no resistance rise, replace.
Is there continuity across the thermal protector?
NO
Replace defective thermal protector.
YES
Contact ADP, head may be frozen.

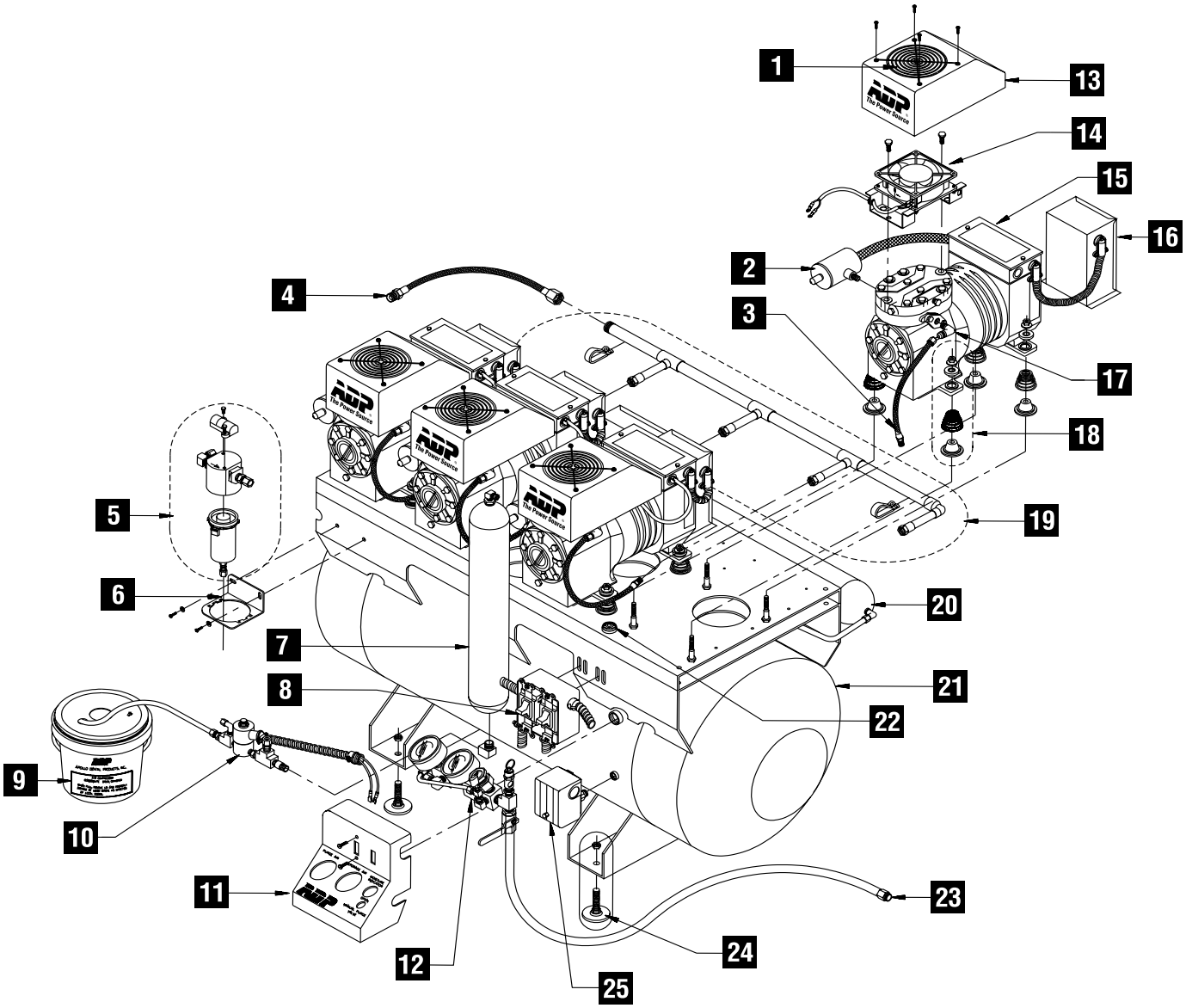
Compressor Wiring Diagram



Return To Table of Contents

Return To Table of Contents

Desiccant Model
Quad Head Lubricated



Return To Table of Contents

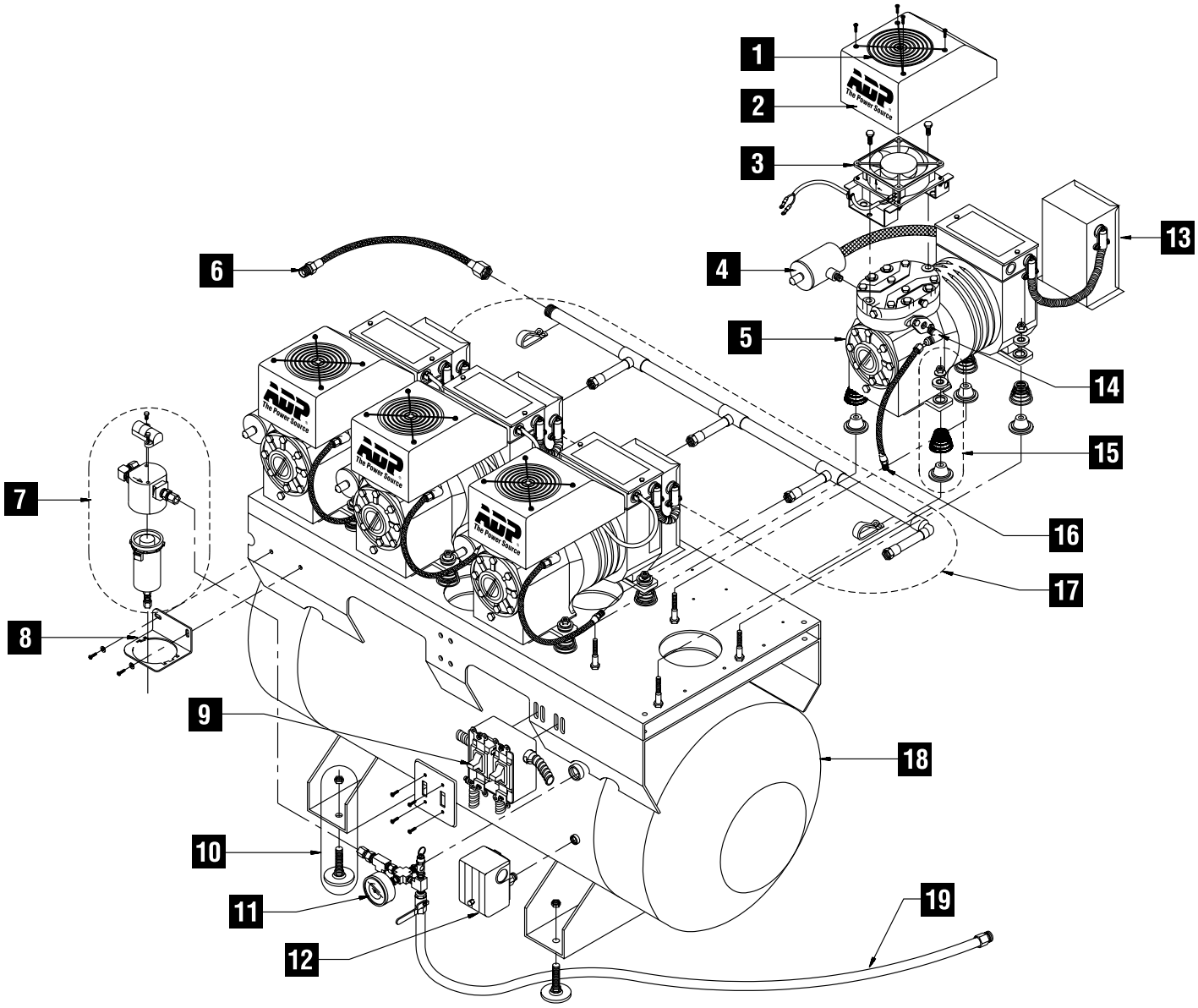
Desiccant Model
Quad Head Lubricated

Item	Description	Quantity	QL82D
1	Guard, Fan	4	MMS70200
2	Filter, Air Intake*	4	ACP90500
3	Hose, Flex 12”	4	PCH50206
4	Hose, Flex 8”	1	PCH50209
5	Assembly, Ultrair	1	ACA85215
5a	Element, .01 micron*	1	PFM86060
5b	Assembly, Float	1	ACA85210
5c	Indicator, Differential Pressure	1	AAP85210
6	Bracket, Ultrair	1	MBS70110
7	Assembly, Dryer Tank w/ Desiccant	1	ACA85307
7a	Kit, Desiccant Replacement	1	ACA85345
8	Switch, ON/OFF	2	ECS10417
9	Canister, Condensate Drain	1	SPA95400
10	Valve, Quick Exhaust	1	PVV70502
10a	Kit, Repair Solenoid	1	ACA85332
10b	Coil, Solenoid Valve	1	ECC10118
11	Shroud, Cluster Panel	1	ACP70210
12	Assembly, Control Cluster	1	SPA94002
12a	Kit, Moisture Indicator	1	ACA85965
12b	Gauge, Air Pressure	2	PGA70400
12c	Valve, Ball 3/8”	1	PVV50500
12d	Valve, Check 3/8”	1	PVV50515
12e	Valve, Manual Purge	1	PVV50550
12f	Valve, Safety 125 PSI	1	PVV50560
13	Shroud, Fan	4	ACP70205
14	Assembly, Fan (w/ Brackets)	4	SEA95240
14a	Fan	4	SEA95540
14b	Bracket, Fan	8	MBS70102
15	Assy, Comp. Head (w/ Oil & Cap. Assy.)	4	ACH95460
15a	Kit, Sight Glass	4	ACA85322
15b	Oil, 16 oz. Bottle*	4	ACA85921
16	Assembly, Capacitor/Relay	4	SPD95291
16a	Capacitor, Start	4	HCA30625
16b	Capacitor, Run	4	HCA30622
16c	Relay, Potential	4	HCA30655
17	Flare Fitting	4	PCB50125
18	Kit, Motor Mount	4	HCA30900
19	Assembly, Manifold	1	SPA95209
20	Tank, Purge	1	STK96014
21	Tank, Receiver (40 gal.)	1	TST90334
22	Level, Bubble	1	MMS70400
23	Hose, 5’ x 3/8”	1	ACA85955
24	Feet, Neoprene	4	MRP70969
25	Switch, Pressure	1	ECS1045
26	Maintenance Kit	1	ACA85407

*** Parts Included In Maintenance Kit**

Return To Table of Contents

Standard Model
Quad Head Lubricated



Return To Table of Contents

Standard Model
Quad Head Lubricated

Item	Descrpition	Quantity	QL82
1	Guard, Fan	4	MMS70200
2	Shroud, Fan	4	ACP70205
3	Assembly, Fan (w/ Bracket)	4	SEA95245
3a	Fan	4	SEA95540
3b	Bracket, Fan	8	MBS70102
4	Filter, Air Intake*	4	ACP90500
5	Assy., Comp. Head (w/ Oil & Oil Cap. Assy.)	4	ACH95460
5a	Kit, Sight Glass	4	ACA85322
5b	Oil, 16 oz. Bottle*	4	ACA85921
6	Hose, Flex 8"	1	PCH50209
7	Assembly, Ultrair Complete*	1	ACA85215
7a	Element, .01 Micron Ultrair	1	ACA86060
7b	Assembly, Float	1	ACA85210
7c	Indicator, Differential Pressure	1	AAP85210
8	Bracket, Ultrair	1	MBS70110
9	Switch, ON/OFF	2	ECS10417
10	Feet, Neoprene	4	MRP70969
11	Assembly, Check Valve	1	SPA96100
11a	Gauge, Air Pressure	1	PGA70400
11b	Valve, Ball 3/8"	1	PVV50500
11c	Valve, Check 3/8"	1	PVV50515
11d	Valve, Safety 125 PSI	1	PVV50560
12	Switch, Pressure	1	ECS10455
13	Assembly, Capacitor/Relay	4	SPD95291
13a	Capacitor, Start	4	HCA30625
13b	Capacitor, Run	4	HCA30622
13c	Relay, Potential	4	HCA30655
14	Flare Fitting	4	PCB50125
15	Kit, Motor Mount	4	HCA30900
16	Hose, Flex 12"	4	PCH50206
17	Assembly, Manifold	1	SPA95209
18	Tank, Receiver (40 gal.)	1	TST90334
19	Hose, 5' X 3/8"	1	ACA85955
20	Maintenance Kit	1	ACA85407

*** Parts Included In Maintenance Kit**

Return To Table of Contents

Glossary of Terms

Air	A mixture of gases in Earth's atmosphere used to sustain life. Note: In dental work, restorative cosmetic bonding air may be considered ULTRA-Dry if its dew point is less than minus 20 degrees Fahrenheit.
Amperage	An electrical term used to describe a unit of current, the ampere.
Barometric Pressure	The absolute atmospheric pressure existing at the surface of the Earth.
CFM	A volume flow measurement in units of cubic feet per minute. *SCFM = Cubic Feet Per Minute at standard conditions
Capacity	A measured volume flow rate used to describe air delivered at conditions of pressure, temperature and existing moisture content in units of CFM.
Check Valve	A device that permits flow in one direction only.
Compressor	A mechanical device used to deliver compressed air above atmospheric pressure (0 PSIG).
Dead-End Pressure	The suction pressure attained by a vacuum pump at zero capacity with the suction absolutely blanked off. Measured in inches of Mercury (HG).
Decibel	A measure of pressure waves used to describe sound pressure or noise level or db-A.
db-A	The decibel level measured on the "A" weighing scale at 1 meter in height and meter in distance from the sound source.
Desiccant	A medium used to extract moisture from air.
Dew Point	The temperature at which the vapor (moisture) in air will begin to condense (form dew).
Discharge Pressure	The total pressure measured at the discharge (outlet of the compressor). The pressure is commonly expressed in pounds per square inch (PSI). Note: Pressure may be expressed in gauge or absolute pressure. PSIG plus atmospheric equals PSIA.
Dryer	A device used to remove moisture from the air. Common types of air dryers include desiccant and refrigerant.
FDA	The United States Food and Drug Administration governing medical device manufacturing procedures.
Filter	A device for separating and removing dust and dirt from air or water. Note: A Coalescing filter is an ultra fine mechanical device used to remove harmful dusts, fumes, mists, smog, smoke, and aerosols from the air.

Return To Table of Contents

Glossary of Terms

Free Air — Free air is defined as air at atmospheric conditions at any specific location. Because the altitude, barometer, and temperature may vary at different localities and at different times, it follows that this term does not mean air under identical or standard conditions.

Gasket — A device used to provide a seal between two mating surfaces usually made of a soft pliable material.

Grain — A unit of measure of moisture in air. One grain is equal to 1/7000 pound.

Horsepower — A unit of work (See Work). One horsepower is the amount of work required to raise 550 pounds a distance of one foot in one seconds time.

Humidity — In normal terms, humidity has to do with moisture (water vapor) in the atmosphere. Relative humidity (RH) is the ratio of the actual partial vapor pressure in an air-vapor mixture to the saturated vapor pressure at the existing dry-bulb temperature, usually expressed in percentage.

Impeller — The dynamic rotating element of the liquid ring vacuum pump which imparts energy to the flowing medium by means of centrifugal force. It consists of a number of blades mounted so as to move with the motor shaft.

Inches of Mercury — A unit of measure (In-Hg) used to describe vacuum, a pressure below atmospheric and defined as a column of mercury of a specified height having a weight proportional to its height and exerting a force to a unit area.

Inches of Water — 13.6 inches of water equals one inch of mercury (See Inches of Mercury above).

Inlet Pressure — The total pressure (static plus velocity) at the inlet of the compressor or vacuum pump. Measured in C.F.M.

KVA — An electrical term used to define transformer ratings of Kilo-Volt-Amperes (Thousands of Volt Amperes).

Liquid Piston-Ring — A rotary vacuum pump in which a veined rotor or impeller revolves in an elliptical casing, with the impeller spaces sealed by a ring of liquid (water) rotating with it inside the casing.

Micron — A unit measure of extremely small particle size, 1 micron = .0004 inches.

N.F.P.A. — National Fire Protection Association. A nonprofit membership organization dedicated to promoting safety from fire, electricity, and related hazards through research, codes and standards, technical advisory services, and public education.

NPT — Abbreviation of the term used to define pipe size of National Pipe Thread.

Return To Table of Contents

Glossary of Terms

Oil	A refined petroleum product used in the cooling and lubrication of reciprocating air compressors.
Piston	The reciprocating component of the air compressor which is guided and retained in a compression cylinder.
Pressure	Pressure is a force per unit area usually expressed in psi (pounds per square inch) for compressors or In-Hg (inches of Mercury) for vacuums.
Reciprocating Compressor	A mechanical device used to compress air in which the reciprocating component is a piston having a reciprocating motion in a cylinder.
Saturation	Occurs when the vapor in air is at the dew point or saturation temperature, (See Dew Point).
Seal	A device used between rotating and stationary parts to separate, and minimize leakage between areas of unequal pressure.
Shaft	The part of the rotating element on which the rotating parts are mounted and by means of which energy is transmitted.
Storage Tank	An air tank or receiver used to store air under pressure.
SCFM	Air compressor volume flow rate measured in Cubic Feet per Minute at Standard Conditions of 14.7 PSIA and 60 degrees Fahrenheit.
Tandem Compressor	Two individual air compressors connected to a common discharge line usually wired to start-run-stop simultaneously.
Temperature	A measure of heat or cold (absence of heat) usually expressed in degrees Fahrenheit or degrees Celsius or Centigrade.
Transformer	An electrical device used to increase (boost) or decrease (buck) voltage usually rated in KVA, (See KVA).
U.L.	The Underwriters Laboratories Incorporated, an independent laboratory testing for public safety.
Vacuum	Vacuum is a type of pressure state when air pressure is below atmospheric, usually measured in In-Hg (Inches of Mercury), or In-H2O (Inches of Water).
Valve	A device that regulates the flow of air or water.
Voltage	An electrical term used to describe an electromotive force expressed in volts.
Work	Work is energy in transition (Energy equals a unit of time). Work can't be done unless there is movement.

Notes:

Notes:

Return To Table of Contents

DENTAL SYSTEM PACKAGES

•

DENTAL VACUUM PACKAGES

•

COMBINATION AIR / VACUUM PRODUCERS

•

OIL-LESS / LUBRICATED DENTAL AIR COMPRESSORS

•

WATER DISTILLERS

•

MERCHANDISE / ACCESSORIES

Apollo Dental Products by MIDMARK®
245 W. Dakota Ave. • Clovis, California 93612 • USA
(559) 292-1444 • (800) 233-4151 • FAX (559) 292-1555
E-Mail: support@apollodental.com
www.apollodental.com

AMM45000 Rev. 11/02